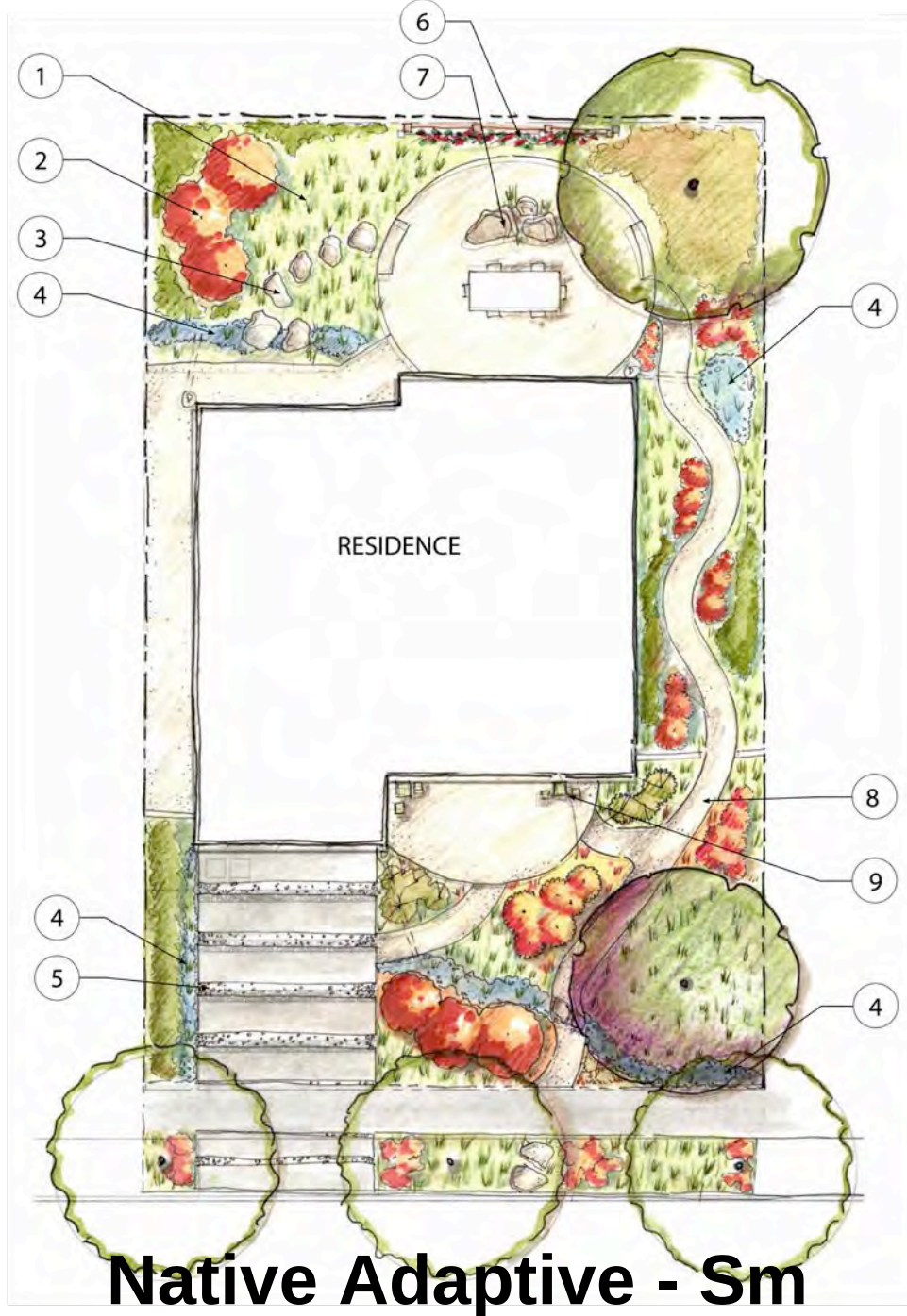








Native Adaptive - Sm



Native Adaptive - Corner









Architectural Rendering: NATIVE ADAPTIVE - A

*House image provided by AFM HOMES INC.



Native Adaptive - Sm



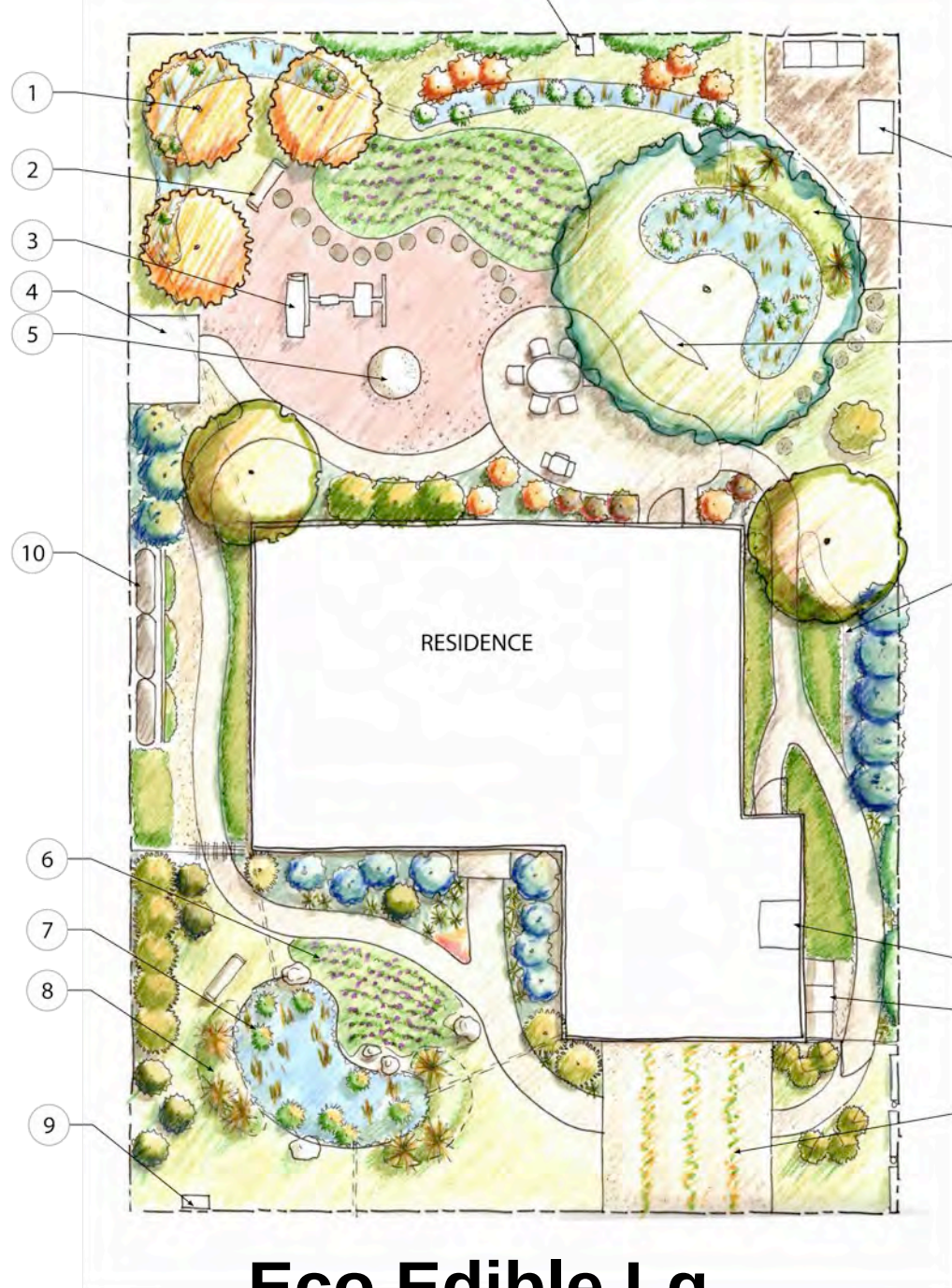
Architectural Rendering: NATIVEADAPTIVE- A (without trees)

*House image provided by AFM HOMES INC.



Native Adaptive - Sm

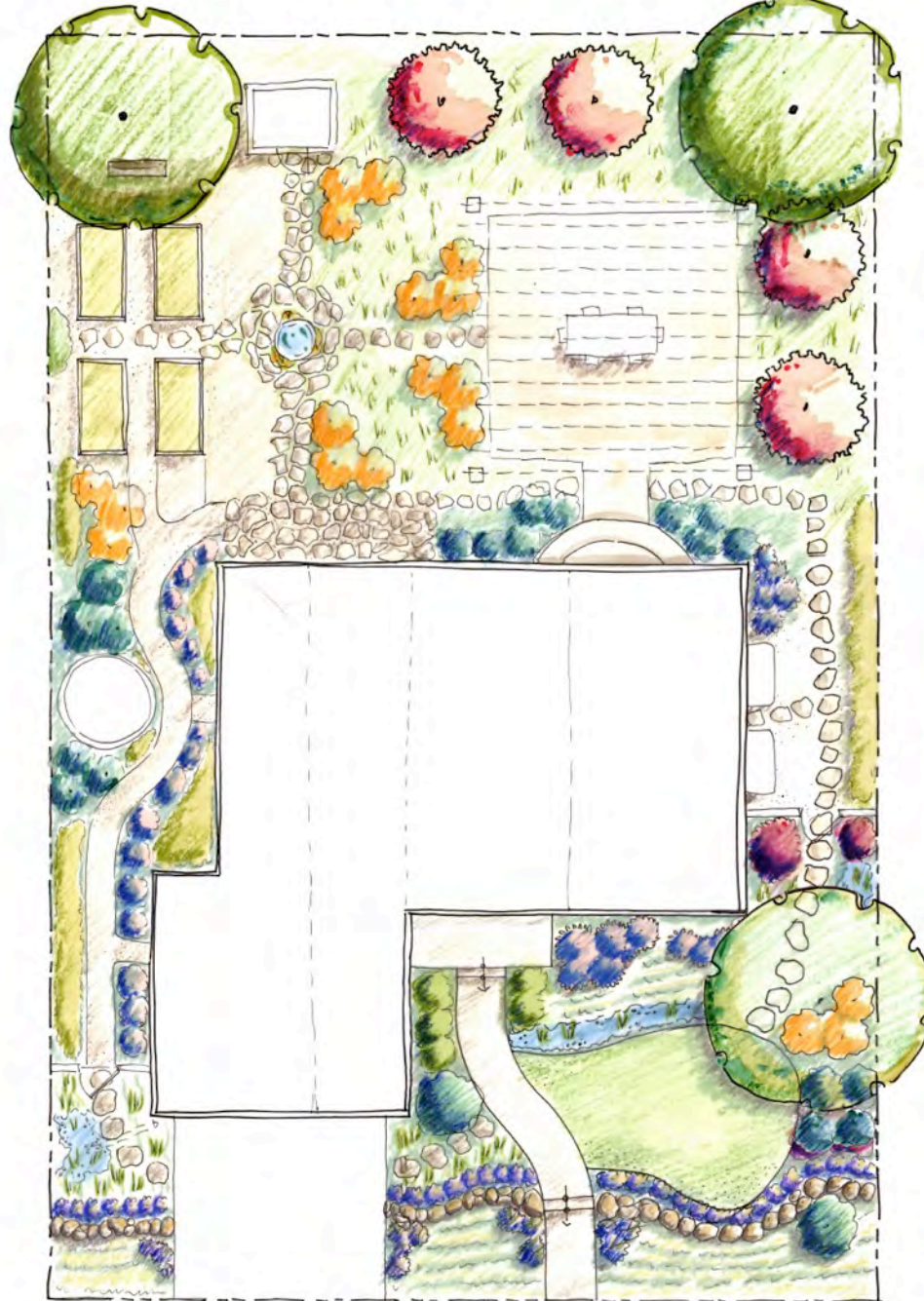




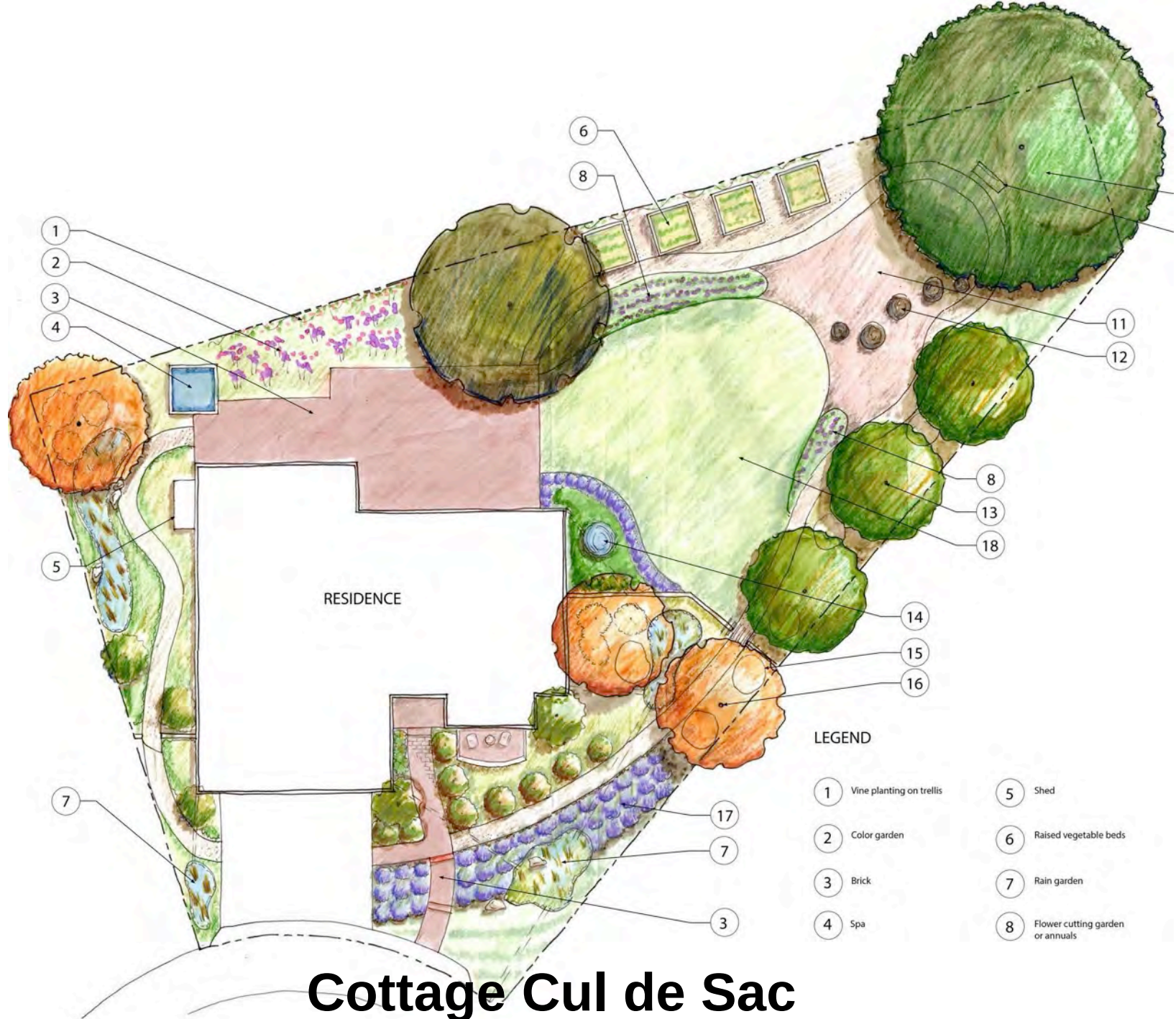
Eco Edible Lg

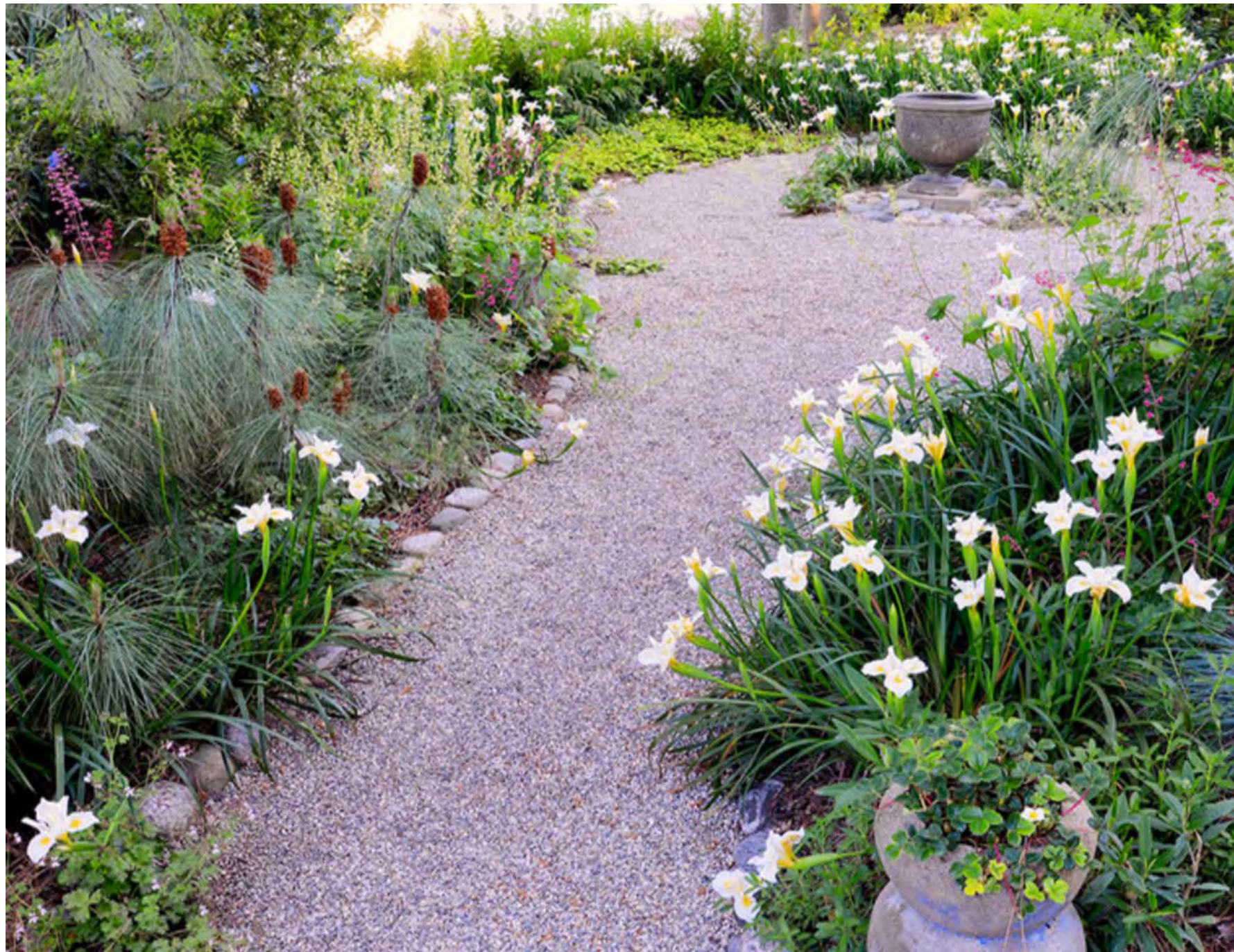






Cottage- Lg









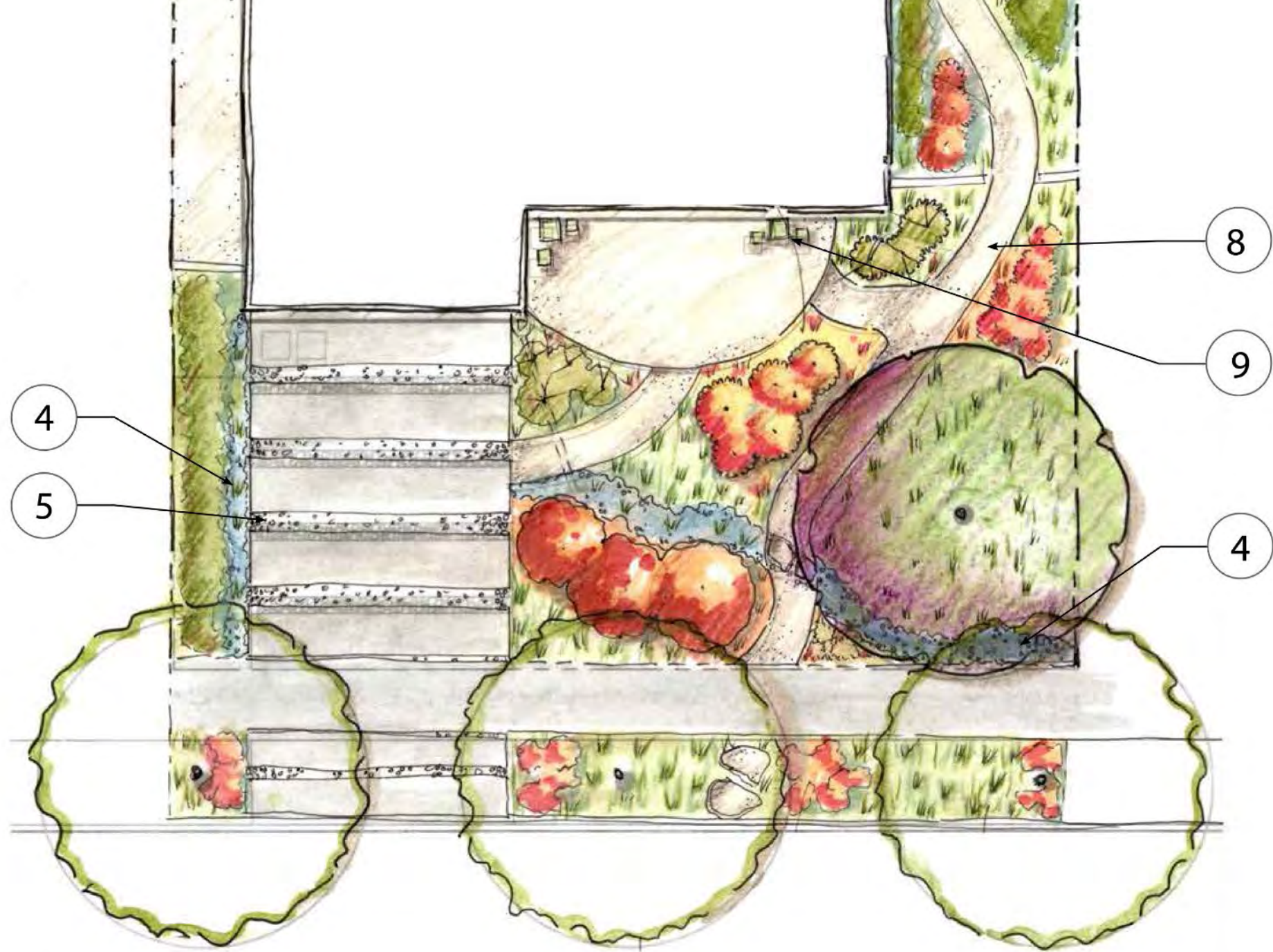
Plant Guidelines:

- 75% Low Water Use
- Approved Plant List
- Fire Safer
- Drought Resilient
- Non Invasive
- Deer Resistant
- Habitat
- Edible

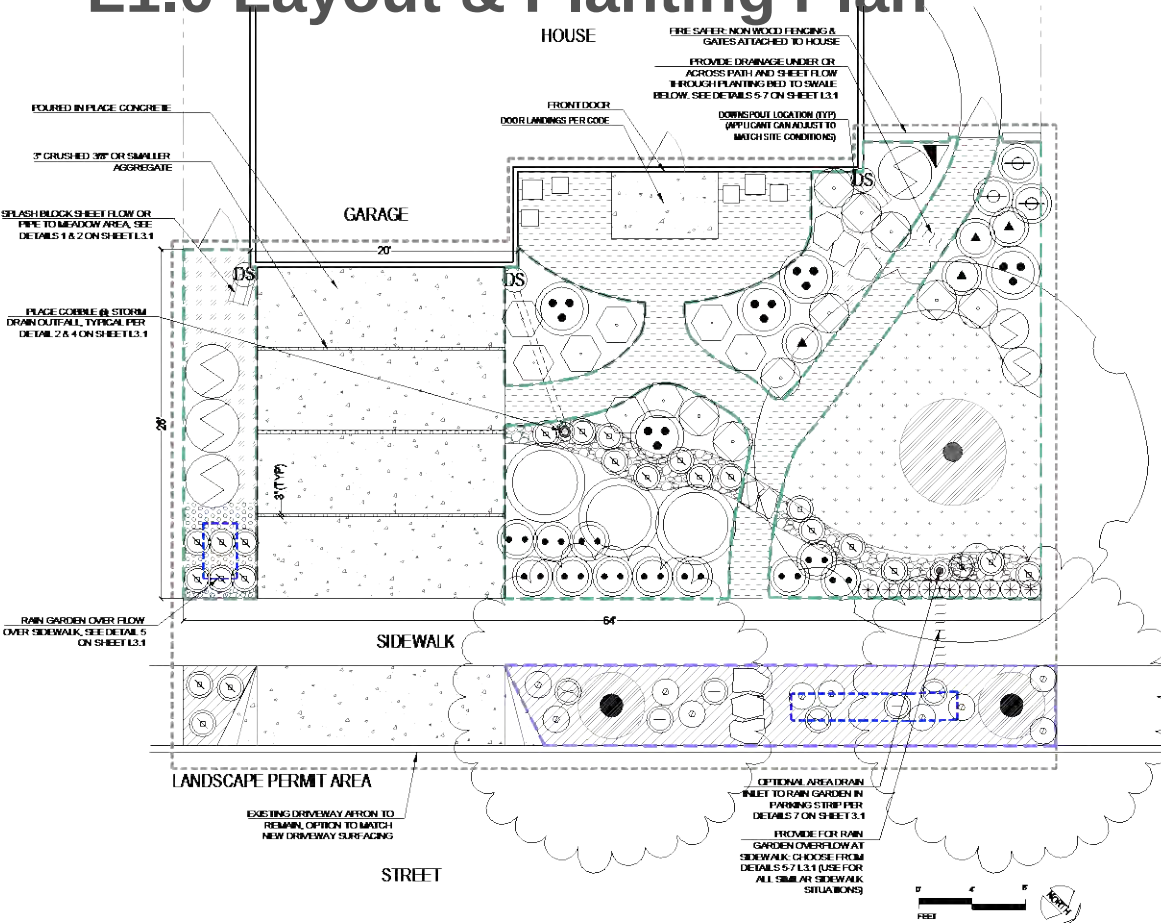


Residential Landscape Design Templates														
Master Plant Substitution List - Low Water Use Plants														
Botanical Name	Common Name	Category	Height	Spread	Evergreen or Decidous	Exposure	Color	Bloom time	Habitat	Native	Edible	WUCOLS	Fire Safer	Deer Resistant
TREES														
<i>Aesculus californica</i>	Buckeye	Trees	30'	25'	Deciduous	Sun- Pt. Shade	White	Apr- May	Butterflies	Yes		VL		Yes
<i>Arbutus 'Marina'</i>	Strawberry Tree	Trees	30'	30'	Evergreen	Sun- Pt. Shade	Pink	Fall/Winter	Birds, Butterflies			L	Yes	Yes
<i>Arbutus unedo</i>	Strawberry Bush	Trees	20'	20'	Evergreen	Sun- Pt. Shade	White	Fall/Winter	Birds, Butterflies		Yes	L	Yes	Yes
<i>Cercis occidentalis</i>	Western Redbud	Trees	12'	8'	Deciduous	Sun	White	Spring	Butterflies, Birds	Yes		L	Yes	Yes
<i>Cercis rensiformis</i>	SouthwestRedbud	Trees	25'	25'	Deciduous	Sun- Pt. Shade	Lt. Purple	Spring	Birds, Butterflies			L	Yes	
<i>Chitalpa tashkentensis</i>	Chitalpa	Trees	25'	25'	Deciduous	Sun	Pink to White	Spring				L		Yes
<i>Diospyros kaki 'Fuyu'</i>	Japanese Persimmon	Trees	20'	15'	Deciduous	Sun	Org-Red Fall				Yes	L		
<i>Diospyros virginiana</i>	American Persimmon	Trees	40'	25'	Deciduous	Sun	Org-Red Fall				Yes	L		
<i>Eriobotrya japonica</i>	Loquat	Trees	25'	20'	Evergreen	Sun	Foliage					L		Yes
<i>Gleditsia triacanthos inermis 'Shademaster'</i>	Honey Locust	Trees	40'	30'	Deciduous	Full Sun	Yellow Fall	Not notable	Birds, Butterflies			L	Yes	Yes
<i>Laurus nobilis</i>	Bay Laurel	Trees	20'	10'	Evergreen	Sun - Pt Shade	Foliage					L		Yes
<i>Metrosideros excelsus</i>	New Zealand Xmas	Trees	30'	20'	Evergreen	Sun- Pt Shade	Foliage					L	Yes	Yes
<i>Morus alba</i>	Fruiting Mulberry	Trees	25'	25'	Deciduous	Sun	NA				Yes	L		
<i>Morus alba 'Fruitless'</i>	Fruitless Mulberry	Trees	40'	40'	Deciduous	Sun	NA					L		
<i>Olea europaea 'Manzanillo'</i>	Olive - fruiting var.	Trees	25'	25'	Evergreen	Sun	Foliage	Summer			Yes	L	Yes	Yes
<i>Olea europea 'Frantoio'</i>	Olive - oil var.	Trees	25'	25'	Evergreen	Sun	Foliage					VL		
<i>Olea europea 'Wilsonii'</i>	Olive - low fruiting var.	Trees	25'	25'	Evergreen	Sun	Foliage				Yes	L	Yes	Yes
<i>Pistacia chinensis</i>	Chinese Pistache	Trees	40'	40'	Deciduous	Sun	Org-Red Fall					L	Yes	Yes
<i>Prunus armenaica</i>	Apricot	Trees	20'	20'	Deciduous	Sun	Pink					L		
<i>Prunus ilicifolia</i>	Holly Leaf Cherry	Trees	16'	16'	Evergreen	Sun-Pt Shade	White		Birds, Butterflies		Yes	L		Yes
<i>Prunus persica</i>	Nectarine	Trees	25'	20'	Deciduous	Sun	Pink					L		
<i>Prunus persica</i>	Peach	Trees	15'	15'	Deciduous	Full Sun	Pink				Yes	L		
<i>Prunus ssp.</i>	Plum - Fruiting	Trees	20'	15'	Deciduous	Full Sun	White				Yes	L		
<i>Pyrus pyrifolia</i>	Asian Pear	Trees	20'	18'	Deciduous	Sun	Foliage					?		
<i>Quercus agrifolia</i>	Coast Live Oak	Trees	50'	50'	Evergreen	Sun-Pt Shade	Foliage		Many	Yes		VL	Yes	Yes
<i>Quercus douglasii</i>	Blue Oak	Trees	40'	60'	Deciduous	Sun	Foliage		Many	Yes		VL		Yes
<i>Quercus douglasii x lobata</i>	Jolon Oak	Trees	50'	40'	Deciduous	Sun	Foliage		Many	Yes		L		
<i>Quercus kelloggii</i>	Black Oak	Trees	50'	40'	Deciduous	Sun-Pt Shade	Yellow in Fall	apr-may	Many	Yes	Yes	L	Yes	Yes
<i>Quercus lobata</i>	Valley Oak	Trees	80'	60'	Deciduous	Sun	Foliage	apr-may	Many	Yes		L	Yes	Yes
<i>Quercus suber</i>	Cork Oak	Trees	35'	35'	Evergreen	Sun	Foliage		Birds, Butterflies			VL		Yes
<i>Quercus tomentella</i>	Island Oak	Trees	40'	40'	Evergreen	Sun- Pt Shade	Foliage		Birds, Squirrels			L		
<i>Quercus wizlizenii</i>	Interior Live Oak	Trees	55'	50'	Evergreen	Sun	Foliage		Many	Yes		VL		Yes
<i>Quercus x morehus</i>	Oracle Oak	Trees	45'	30'	Semi Decid	Sun- Pt Shade	Foliage		Birds, Butterflies	Yes		L		
<i>Rhus lancea</i>	African Sumac	Trees	25'	25'	Evergreen	Sun	Foliage		Birds, Butterflies			L	Yes	Yes
<i>Schinus molle</i>	California Pepper	Trees	30'	30'	Evergreen	Sun	Foliage					L	Yes	Yes
<i>Tilia tomentosa</i>	Silver Linden	Trees	50'	40'	Deciduous	Sun- Pt. Shade	Yellow in Fall		Bees			L		
<i>Ulmus parvifolia "Drake"</i>	Clinese Elm	Trees	60'	40'	Semi Decid	Sun	Purple					L		Yes
SHRUBS														
<i>Arctostaphylos 'John Dourley'</i>	John Dourley Manzanita	Shrubs	3'	6'	Evergreen	Sun	White	Nov.-Jan	Birds, Beneficials			L	no	Yes
<i>Arctostaphylos 'Emerald Carpet'</i>	Emerald Carpet Manzanita	Shrubs	18"	5'	Evergreen	Sun			Birds, Beneficials			M	Yes	
<i>Arctostaphylos edmundsii & varieties</i>	Bearberry	Shrubs	10"	30"	Evergreen	Sun to Pt Shade	White	Nov.-Jan	Birds, Beneficials			L	no	Yes
<i>Arctostaphylos hookeri 'Monterey Carpet'</i>	Monterey Carpet Manzanita	Shrubs	12"	6'	Evergreen	Sun to Pt Shade	White		Birds, Beneficials			L		Yes
<i>Arctostaphylos 'Pacific Mist'</i>		Shrubs	2'	10'	Evergreen	Sun	White		Birds, Beneficials			L		Yes
<i>Arctostaphylos 'Sentinel'</i>	Vine Hill Manzanita	Shrubs	4'	4'	Evergreen	Sun	Pink	Nov.-Jan	Beneficials			L	no	Yes





L1.0 Layout & Planting Plan



APPLICANT INSTRUCTIONS:

1. MEASURE ENTIRE FRONT YARD AREA. SUBTRACT HARDSCAPE AREAS TO GET THE TOTAL SQUARE FEET OF PLANTED AND IRRIGATED AREA. ENTER THIS NUMBER IN THE PLANT WATER USE TABLE ON THIS SHEET.
2. IF NEEDED USE A RED PEN TO ADJUST THE LAYOUT OF DRIVEWAY, PATH AND PLANTING AREAS TO FIT YOUR YARD.
3. ADJUST ORIENTATION OF NORTH ARROW TO SITE CONDITION.
4. ADD ANY EXISTING TREES WANTED ON THE PLAN. ADJUST TREE LOCATIONS IF NEEDED TO FIT YOUR SITE.
5. FILL IN PLANT WATER USE TABLE.
6. INSURE LESS THAN 25% OF PLANTED AREA IS MEDIUM WATER USE PLANTINGS.
7. IN THE LEGEND, CIRCLE THE HARDSCAPE MATERIALS YOU WILL BE USING AND ON DETAIL SHEETS L3.0, L3.1 & L3.2.
8. INDICATE ANY SUBSTITUTIONS TO THE PLANTINGS BY CROSSING OUT THE LISTED PLANTS AND WRITING THE SUBSTITUTION BELOW IN RED INK. MAKE SURE THE PLANTS USE OF WATER USE AND ARE ROUGHLY THE SAME SIZE (SEE SONOMA MARIN SAVING WATER PARTNERSHIP @ <http://www.sonomaparksavingwater.org>) FOR SUBSTITUTIONS).
9. MOVE TO THE IRRIGATION PLAN AND FILL IN THE AREAS INDICATED ON THAT SHEET.

NOTE:

1. PLANTING DESIGN FOR FULL COVER WITH IN 3 YEARS.
2. THE GARDEN IS DESIGNED TO CAPTURE AND INFILTRATE SOME STORM WATER ON SITE. WHEN THE FLOW IS DIRECTED TO A SWALE OR RAIN GARDEN, IT NEEDS AN OVERFLOW OUTLET THAT WON'T ERODE. OPTIONS ARE PROVIDED ON THE DETAIL SHEETS. SPLASH BLOCKS AND OUTLETS IN PLANTING BEDS ARE MEANT TO SPREAD THE FLOW TO SHEET FLOW OVER PLANTING AREAS AND NO OVERFLOW DEVICE IS NEEDED.
3. REVIEW IRRIGATION SHEETS AND INSTALL SLEEVES UNDER PAVING SURFACES IN THEIR CORRECT LOCATION.

PLANT WATER USE TABLE			
APPLICANT PLANTED & IRRIGATED AREA:			
ZONE	WATER USE	PLAN SQ. FT.	PERMIT SQ. FT. (10%)
1	LOW	167 (70%)	
2	MED	229 (21%)	
TOTAL		1,086 (80%)	

MATERIALS LEGEND

	UNITS	PLAN QUANTITY	PERMIT QUANTITY (7% 10%)
VEHICULAR PAVING			
CONCRETE	SF	400	
PEDESTRIAN PAVING			
ASPHALT/GRANULAR FILL OVER FORM (SEE DETAIL L3.0)	SF	200	
BRICK (SEE DETAIL 4 ON SHEET L3.1)	SF		
STORM WATER ELEMENTS			
DRINKING WATER CISTERN (10' DIA. TYPICAL) COVER WITH 1/2" DIA. DRINKING WATER CISTERN (SEE DETAIL 13.1)	SF	40	
RAIN GARDEN (10' DIA. TYPICAL) COVER WITH 1/2" DIA. DRINKING WATER CISTERN (SEE DETAIL 13.1)	SF	40	
STORM DRAINAGE (SEE DETAIL 13.1)	EA	1	
STORM DRAINAGE (SEE DETAIL 13.1)	SF	20	

*SEE SHEETS L3.0-3.2 FOR MATERIALS OPTIONS

PLANTING LEGEND

PLANTING LOW WATER USE

AREA	PLANT NAME	SIZE	SPACING	PLAN QUANTITY	PERMIT QUANTITY (7% 10%)
LANDSCAPE	LOW WATER USE PLANT (SEE DETAIL 13.1)	10'	20' DIA.	1	
LANDSCAPE	LOW WATER USE PLANT (SEE DETAIL 13.1)	10'	20' DIA.	2	

GROUND COVER

GROUND COVER	GROUND COVER (SEE DETAIL 13.1)	4'	10' DIA.	10	
--------------	--------------------------------	----	----------	----	--

GRASSES/SEDGES/GRASSES

GRASSES/SEDGES/GRASSES	GRASSES/SEDGES/GRASSES (SEE DETAIL 13.1)	4'	20' DIA.	100	
------------------------	--	----	----------	-----	--

PERENNIALS 0-2' SUN	PERENNIALS 0-2' SUN (SEE DETAIL 13.1)	4'	10' DIA.	5	
---------------------	---------------------------------------	----	----------	---	--

PERENNIALS 2-4' SUN	PERENNIALS 2-4' SUN (SEE DETAIL 13.1)	4'	20' DIA.	20	
---------------------	---------------------------------------	----	----------	----	--

PERENNIALS 4-6' SUN	PERENNIALS 4-6' SUN (SEE DETAIL 13.1)	4'	40' DIA.	10	
---------------------	---------------------------------------	----	----------	----	--

PERENNIALS 6-8' SUN	PERENNIALS 6-8' SUN (SEE DETAIL 13.1)	4'	80' DIA.	5	
---------------------	---------------------------------------	----	----------	---	--

PERENNIALS 8-10' SUN	PERENNIALS 8-10' SUN (SEE DETAIL 13.1)	4'	160' DIA.	5	
----------------------	--	----	-----------	---	--

PERENNIALS 10-12' SUN	PERENNIALS 10-12' SUN (SEE DETAIL 13.1)	4'	320' DIA.	5	
-----------------------	---	----	-----------	---	--

PERENNIALS 12-14' SUN	PERENNIALS 12-14' SUN (SEE DETAIL 13.1)	4'	640' DIA.	5	
-----------------------	---	----	-----------	---	--

PERENNIALS 14-16' SUN	PERENNIALS 14-16' SUN (SEE DETAIL 13.1)	4'	1280' DIA.	5	
-----------------------	---	----	------------	---	--

PERENNIALS 16-18' SUN	PERENNIALS 16-18' SUN (SEE DETAIL 13.1)	4'	2560' DIA.	5	
-----------------------	---	----	------------	---	--

PERENNIALS 18-20' SUN	PERENNIALS 18-20' SUN (SEE DETAIL 13.1)	4'	5120' DIA.	5	
-----------------------	---	----	------------	---	--

PERENNIALS 20-22' SUN	PERENNIALS 20-22' SUN (SEE DETAIL 13.1)	4'	10240' DIA.	5	
-----------------------	---	----	-------------	---	--

PERENNIALS 22-24' SUN	PERENNIALS 22-24' SUN (SEE DETAIL 13.1)	4'	20480' DIA.	5	
-----------------------	---	----	-------------	---	--

PERENNIALS 24-26' SUN	PERENNIALS 24-26' SUN (SEE DETAIL 13.1)	4'	40960' DIA.	5	
-----------------------	---	----	-------------	---	--

PERENNIALS 26-28' SUN	PERENNIALS 26-28' SUN (SEE DETAIL 13.1)	4'	81920' DIA.	5	
-----------------------	---	----	-------------	---	--

PERENNIALS 28-30' SUN	PERENNIALS 28-30' SUN (SEE DETAIL 13.1)	4'	163840' DIA.	5	
-----------------------	---	----	--------------	---	--

PERENNIALS 30-32' SUN	PERENNIALS 30-32' SUN (SEE DETAIL 13.1)	4'	327680' DIA.	5	
-----------------------	---	----	--------------	---	--

PERENNIALS 32-34' SUN	PERENNIALS 32-34' SUN (SEE DETAIL 13.1)	4'	655360' DIA.	5	
-----------------------	---	----	--------------	---	--

PERENNIALS 34-36' SUN	PERENNIALS 34-36' SUN (SEE DETAIL 13.1)	4'	1310720' DIA.	5	
-----------------------	---	----	---------------	---	--

PERENNIALS 36-38' SUN	PERENNIALS 36-38' SUN (SEE DETAIL 13.1)	4'	2621440' DIA.	5	
-----------------------	---	----	---------------	---	--

PERENNIALS 38-40' SUN	PERENNIALS 38-40' SUN (SEE DETAIL 13.1)	4'	5242880' DIA.	5	
-----------------------	---	----	---------------	---	--

PERENNIALS 40-42' SUN	PERENNIALS 40-42' SUN (SEE DETAIL 13.1)	4'	10485760' DIA.	5	
-----------------------	---	----	----------------	---	--

PERENNIALS 42-44' SUN	PERENNIALS 42-44' SUN (SEE DETAIL 13.1)	4'	20971520' DIA.	5	
-----------------------	---	----	----------------	---	--

ABLA
 ANIMATED LANDSCAPE ARCHITECTURE
 1000 10TH AVENUE, SUITE 100
 FORT LAUDERDALE, FL 33304
 TEL: 954.575.1000

daily acts
 landscape design services

ForeSite
 digital landscape solutions

Equinox
 LANDSCAPE

SHERWOOD
 DESIGN ENGINEERS

P D G

RESIDENTIAL LANDSCAPE DESIGN TEMPLATE
 SONOMA MARIN SAVING WATER PARTNERSHIP
 1000 10TH AVENUE, SUITE 100
 FORT LAUDERDALE, FL 33304
 TEL: 954.575.1000

DATE: 10/15/2015
 PERMIT PLAN: L1.0

L1.0

SHEET OF

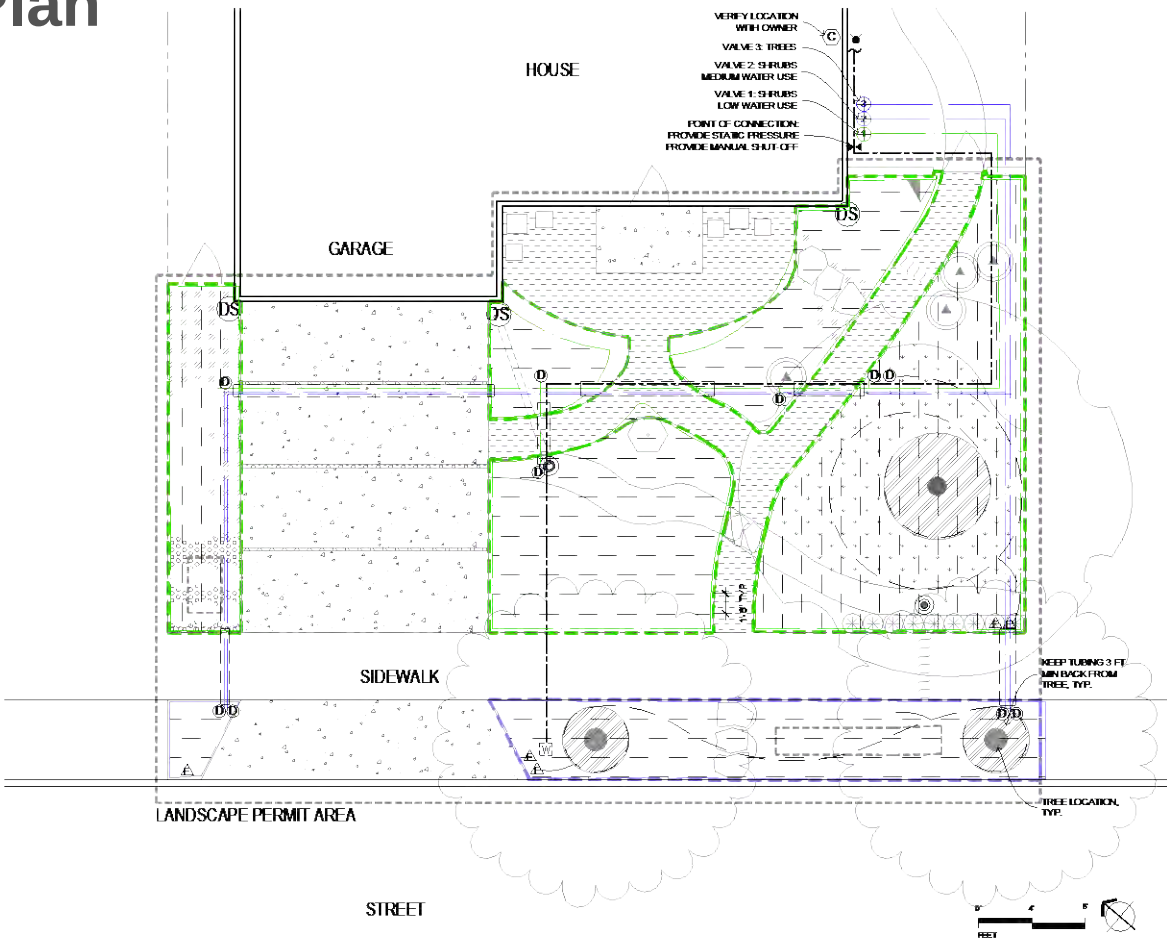
L2.0 Irrigation Plan

IRRIGATION LEGEND

APPLICANT CHECK-OFF COMPONENTS	SYMBOL	COMPONENT	MANUFAC - TUBER	MODEL	NOTES / SIZE / COLOR
	W	EXISTING WATER METER			
	C	CONTROLLER	HUNTER	PRO-C	INDOOR
	•	WEATHER SENSOR	HUNTER	SOLAR-SYNC SEN	WIRED
	+	FULL PORT BALL VALVE	NIBCO	505	LINE SIZE
	---	SLEEVE		PVC SCH 40	
	---	MAINLINE		PVC SCH 40 WITH SCH 40 SOIL VENT WELD FITTINGS	
	---	LATERAL PIPE (COLOR VARIES PER ZONE)		PVC SCH 40 WITH SCH 40 SOIL VENT WELD FITTINGS	PIPE SIZE: 0.6 GPM 3/4" PIPE; 7-12 GPM 1" PIPE
		DRIPIRRIGATION CONTROL VALVE ASSEMBLY TO INCLUDE:			
		ASSEMBLY			ALL IN ONE KIT INCLUDES BACKFLOW PREVENTION, FILTER AND PRESSURE REGULATOR
		ANTI-SIPHON VALVE (COLOR VARIES PER ZONE)	HUNTER	PGW ASV, INCLUDED IN KIT	3/4" INCH ANTI-SIPHON VALVE PROVIDES BACKFLOW PREVENTION
		DRIPI FILTER		INCLUDED IN KIT	100 MESH STAINLESS STEEL SCREEN
		PRESSURE REGULATOR		INCLUDED IN KIT	40 PSI
		NIPTLE			PVC SCH 40 UV RESISTANT
	I	TRANSITION TO DRIP ZONE			
		DRIPI LAYOUT			
		PLANTING BEDS			
		TREES			
		IRIGINE Emitter Tubing	NETAFIM		CLAY SOIL: Emitter Flow: 0.20 GPH; Emitter Spacing: 18"; ROW Spacing: 18" LOAM SOIL: Emitter Flow: 0.4 GPH; Emitter Spacing: 18"; ROW Spacing: 18" SANDY SOIL: Emitter Flow: 0.6 GPH; Emitter Spacing: 18"; ROW Spacing: 18"
		DRIPI FLUSHOUT	NETAFIM	IF105	
		SYMBOLS FOR COMPONENTS ARE LARGER THAN ACTUAL SIZE AND MAY BE SHOWN IN PAVED AREAS FOR GRAPHIC CLARITY. COORDINATE LOCATION OF EQUIPMENT WITH UTILITIES.			
		ALL PIPE RUNS UNDER PAVING ARE IN SLEEVES, INSTALL SLEEVES PRIOR TO POURING CONCRETE.			

APPLICANT INSTRUCTIONS:

1. ADJUST LAYOUT OF PLANTING BEDS IF CHANGED ON LAYOUT SHEET 1.0.
2. REVIEW IRRIGATION VALVE TABLE TO ADJUST SF AREAS OF VALVE ZONES.
3. IF AREAS EXCEED MAX SUBZONE FLOW (3 GPM) DIVIDE INTO ADDITIONAL SUBZONES AND ENTER UNDER SUBZONE COLUMN.
4. IF AREAS EXCEED MAX ZONE FLOW (7 GPM) ADD A VALVE AND ENTER SF AREA NEXT TO NEW VALVE NUMBER (1P OR 1C).
5. DRAW OUT NEW SUBZONE AND/OR VALVE ZONE AREA ON PLAN IN NEW COLOR.
6. ADD VALVE AS NEEDED TO VALVE NAME C.O.D.
7. REVIEW IRRIGATION LEGEND AND CHECK-OFF THAT ALL COMPONENTS ARE SHOWN ON ADJUSTED PLAN.
8. NOTE ANY EQUIPMENT SUBSTITUTIONS.



PLANT WATER USE TABLE			
APPLICANT PLANTED & IRRIGATED AREA:			
ZONE	WATER USE	PLAN SQ. FT.	PERMIT SQ. FT. (FILL IN)
1	LOW	857 (75%)	
2	MED	229 (21%)	
TOTAL		1,086 (100%)	

IRRIGATION VALVE TABLE

HYDRO ZONE	WATER USE	VALVE	PLAN SF	SUB- ZONES	PERMIT SF (FILL IN)	SUB- ZONES (FILL IN)	SOIL TYPE (CLAY / LOAM / SAND) (FILL IN)
1	LOW	1A	857 SF	5			
		4B					
2	MED	2A	229 SF	2			
		2B					
3	TREES	4A	120 LF	2			
		4B					

CLAY SOIL: DO NOT EXCEED 1000 SF / 3 GPM PER SUBZONE. IF TOTAL AREA OF ZONE EXCEEDS 3600 SF, ADD A VALVE.
LOAM SOIL: DO NOT EXCEED 1100 SF / 3 GPM PER SUBZONE. IF TOTAL AREA OF ZONE EXCEEDS 2200 SF, ADD A VALVE.
SANDY SOIL: DO NOT EXCEED 100 SF / 3 GPM PER SUBZONE. IF TOTAL AREA OF ZONE EXCEEDS 1000 SF, ADD A VALVE.
TREES: DO NOT EXCEED 200 LF PER SUBZONE.
FOR Emitter FLOW, Emitter Spacing & ROW Spacing PER SOIL TYPE SEE LEGEND

ABLA
ANIMATED LANDSCAPE ARCHITECTURE
PROFESSIONAL, INC. 114
FLORIAN, CALIFORNIA
TEL: 925-255-1144
WWW.ABLA-ARCHITECTS.COM

daily acts
landscape architecture
ForeSite
Digital mapping solutions
Equinox
LANDSCAPE
SHERWOOD
DESIGN ENGINEERS
P D G
Pamela C. Sherman, Director
Landscape Architecture & Planning

RESIDENTIAL LANDSCAPE DESIGN TEMPLATE
BRUSH-PAINTED LAYOUT WATER PANTHER
www.sherwooddesign.com

NAME: _____ SITE ADDRESS: _____

SAVING WATER PARTNER
WATERSHEDS

SHEET TITLE:
IRRIGATION PLAN
NATURAL MED

DATE: _____
PROJECT PLAN
REV: 1A, 2A, 3A

L2.0

SHEET
OF

1. CONTROLLER MOUNTED ON INTERIOR WALL AT EYE LEVEL

2. SOLAR SYNC MOUNTED ON SUITABLE EXTERIOR POST, POLE OR UTILITY IN LOCATION WHERE SENSOR CAN RECEIVE UNOBSTRUCTED EXPOSURE TO SUN AND RAINFALL

3. CONDUIT PER VALVE CONTAINS WIRE AND SOLAR SYNC COMMUNICATION WIRE. SIZE AND TYPE PER LOCAL CODES. MAX. TOTAL WIRE DISTANCE 200 FT.

4. EXISTING GROUNDED OUTLET

5. PLUG-IN TRANSFORMER

6. INTERIOR WALL

7. EXTERIOR WALL

8. FINISH GRADE INTERIOR FLOOR

9. FINISH GRADE EXTERIOR GRADE

NOTES:

- OWNER'S REPRESENTATIVE TO VERIFY LOCATION IN FIELD. ALL ELECTRICAL WIRING MUST CONFORM TO LOCAL CODES.

18'

6'

1 CONCRETE SLAB
2 STEEL PLATE OF ASPHALT
3 AGGREGATE BASE
4 GRAVELLY SUBGRADE
5 SUBGRADE AND DRAIN
6 CONCRETE SLAB FOR SUBGRADE
7 SUBGRADE
8 SUBGRADE
9 SUBGRADE

NOTES:

1 TO VALVE
2 DRIP TRANSITION. SEE DETAIL
3 SUPPLY HEADER
4 SEE LEGEND FOR EMITTER AND ROW SPACING
5 STAKE TUBING EVERY 2 FT.
6 AREA PERIMETER. VARIES
7 EXHAUST HEADER
8 FLUSHOUT. SEE DETAIL

NOTES:
1. THIS LAYOUT FOR MEDIUM AND LARGE AREA
2. SEE LEGEND FOR SPECIFIC EQUIPMENT
3. SEE LEGEND FOR SPECIFIC EQUIPMENT
4. SEE LEGEND FOR SPECIFIC EQUIPMENT
5. SEE LEGEND FOR SPECIFIC EQUIPMENT
6. SEE LEGEND FOR SPECIFIC EQUIPMENT
7. SEE LEGEND FOR SPECIFIC EQUIPMENT
8. SEE LEGEND FOR SPECIFIC EQUIPMENT

The diagram illustrates the components and assembly steps for a trench box. The components are numbered 1 through 11. The assembly steps are listed to the right of the diagram.

Components:

- 1: POWER HOIST
- 2: CHAIN
- 3: TO HOIST RIGID TRENCH BOX
- 4: RIGID TRENCH BOX
- 5: TO PUT TO PILE TRENCH
- 6: CHAIN RIGID TRENCH
- 7: RIGID BOX AS SHOWN AS TRENCH
- 8: PUT TO (TRENCH)
- 9: PUT LIFTING
- 10: PUT CHAIN, SEE ABOVE
- 11: TO HOIST RIGID TRENCH BOX

Assembly Steps:

1. POWER HOIST
2. CHAIN
3. TO HOIST RIGID TRENCH BOX
4. RIGID TRENCH BOX
5. TO PUT TO PILE TRENCH
6. CHAIN RIGID TRENCH
7. RIGID BOX AS SHOWN AS TRENCH
8. PUT TO (TRENCH)
9. PUT LIFTING
10. PUT CHAIN, SEE ABOVE
11. TO HOIST RIGID TRENCH BOX

IRRIGATION NOTES

1. INSTALLATION TO BE BY CONTRACTOR WITH A VALID CURRENT LICENSE OR BY HOMEOWNER WITH RELEVANT KNOWLEDGE & EXPERIENCE.
2. THE IRRIGATION PLAN IS DIAGRAMMATIC AND INDICATIVE OF COMPLETED, BROAD NON-EXHAUSTIVE INFORMATION. THE AREAS FOR GRAPHIC CLARITY, OBTAIN APPROVAL OF LAYOUT REPRESENTATIVE PRIOR TO FINAL INSTALLATION.
3. VERIFY LOCATION OF SURFACE UTILITIES, UTILITIES AND STRUCTURES. PROVIDE REPRESENTATIVE 15' X 10' LAYOUT SCHEMATIC SHOWN ON THE PLANS BE FOUND DURING EXCAVATIONS.
4. CAREFULLY INVESTIGATE EXISTING PEEL & CONDITIONS AND REPRESENTATIVE OF ANY POTENTIAL CONFLICT WITH DESIGN.
5. CONFIRM EXISTING GENERATION OF CONNECTIONS WITH DESIGN.
6. CONFIRM EXISTING STATIC PRESSURE. AT THE POINT OF CONTACT OF WORK.
7. NOTIFY OWNERS REPRESENTATIVE IF STATIC PRESSURE IS REQUIRED. IF STATIC PRESSURE IS HIGHER THAN 75 PSI, IN ADDITION PRESSURE REGULATOR (DOWNSTREAM OF BACKFLOW

10. REPRESENTATIVE. ENSURE 120 VOLTA C ELECTRICAL SUPPLY FOR IN IMMEDIATE VICINITY. INSTALL AS DETAIL AND PER INSTRUCTIONS. GROUND CONTROLLER AND CONFORMED TO LOCAL MEANT WEATHER SENSITIVE ON EITHER WALL OR CUTTER BY EXPOSED TO UNOBSERVED RAINFALL. INSTALL PER MANUAL INSTRUCTIONS.
11. BACKFLOW PREVENTION IS REQUIRED. IF NOT PROVIDED BY VALVES THEN CODE APPROVED BACKFLOW PREVENTION DEBE INSTALLED.
12. INSTALL ISOLATION VALVE AT POC UPSTREAM OF BACKFLOW (WATER SHUT OFF VALVE)
13. ENSURE THAT ALL COMPONENTS ARE CONNECTED AND OPERATIONAL
14. PROVIDE PVC 500 LB STEEL RISERS FOR ALL FLOWING AND WERE LINED COORDINATE WITH CONCRETE CONTRACTOR INSTALL SLEEVES FLOORING CONCRETE. EXTEND 50 LB PVC 10 INCHES BEYOND EXISTING. ENSURE THAT SLEEVES ARE SIZED ACCORDINGLY TO CONTROL SLEEVES.
15. ENSURE ADEQUATE PIPE SIZE TO PROVIDE REQUIRED FLOW.
16. PIPE COVER: SEE DETAIL
17. PIPE SIZE: 40.0 INCHES 44.0 INCHES 47.0 INCHES 50.0 INCHES
18. INSTALL ALL PLASTIC PIPING IN TRENCHES IN A SERPENTINE

NOTE: SEE PLAN FOR NEW TUBING TO BE INSTALLED TO EXISTING LAYOUT AS SHOWN.

1. VALVE MANIFOLD
 2. PVC LATERAL
 3. TRANSITION FROM LATERAL TO DRIP ZONE
 4. DRIP ZONE
 5. IN-LINE DRIP TUBING. INSTALL PERPENDICULAR TO SLOPE
 6. BLANK DRIP TUBING. USE TO EXTEND FLUSH-OUT TO ACCESSIBLE LOCATION
 7. STAKE TUBING EVERY 2 FT.
 8. TO FLUSHOUT

NOTES:
 1. THIS LAYOUT FOR SMALL AREAS.
 2. DETAIL IS GENERIC. SEE LEGEND FOR SPECIFIC EQUIPMENT
 3. MAXIMUM FLOW PER SUBZONE: 3

1. IN A VALID CURRENT CALIFORNIA C-27 PLANT KNOWLEDGE, SKILLS & ABILITY. 2. INDICATIVE OF THE WORK TO BE PERFORMED MAY BE OBTAINED BY REVIEW OF LAYOUT FROM OWNERS LISTS, PIPES AND STRUCTURES, NOTIFICATION LETTERS OR OTHER WORK NOTIFICATIONS. 3. CONDITIONS AND NOTIFY OWNERS OF ANY DEFECTS OR DEFICIENCIES. 4. CONNECTED TO START OF WORK THE POINT OF CONNECTION POINT TO THE MAIN PRESSURE IS LESS THAN 10' THAN 75' FEET. INSTALL A WELDED JOINT OF BACKFLOW PREVENTER. ADJUST	1. LOTS FOR EACH JOB. 2. INSTALL ALL WIRING IN ACCORDANCE WITH ALL APPLICABLE CODES. 3. USE COPPER WIRE WHEN ALL APPROVAL FOR DIRECT BURNING GROUND. USE WHITE INSULATING JACKET FOR COMMON GROUND WIRE. USE INSULATING JACKET OF COLOR OTHER THAN WHITE FOR CONTROL WIRE. TAPS AND BUNDLE WIRING AT 90° INTERVALS. 4. CHECK VALVES: INSTALL CHECK VALVES ON ALL LATERAL LINES AS REQUIRED TO PREVENT LOW HEAD DRAINAGE. ENSURE THAT IN LINE DRIP TUBING HAS CHECK VALVES EMBEDDED INTO EMITTERS. 5. PRESENT: WHAT ALL EQUIPMENT IS USED CORRECTLY BASED ON EXISTING SITE CONDITIONS AND HYDRAULICS. 6. VERIFY SOIL TYPE AND USE APPROPRIATE EMITTER SIZE AND SPACING. 7. INSTALL DRIP TUBING AS SHOWN IN DETAIL, AND PER MANUFACTURERS SPECIFICATIONS. 8. DO NOT USE SMALL DIAMETER DISTRIBUTION TUBING. 9. DO NOT INSTALL PART MANUFACTURED RETURN EMITTERS INTO IN LINE TUBING. 10. REVIEW DRIP LAYOUT WITH OWNERS BEFORE EMITTERS PRIOR TO COVERING
---	---

ELECTRICAL SUPPLY IS PROVIDED
LEADS AND PER MANUFACTURERS
INSTRUCTIONS. WIRE MUST BE
CONFORM TO LOCAL CODES.
WALL OR CEILING WIRE IT WILL BE
INSTALL PER MANUFACTURERS
INSTRUCTIONS.

NOT PROVIDED BY ANTI-SIPHON
IN PREVENTION DEVICE MUST BE
PREVENTION OF BACKFLOW PREVENTION

CONNECTED AND OPERATIONAL
SHRUBS AND WIRE UNDER PAVING
OR INSTALLED SLEEVES PRIOR TO
CUTS BEYOND EDGE OF PAVING
FAIRLY TO CONTAIN PESTS BEING
TO RECLAIM FLOW.

NOTE:
IN A SERPENTINE MANNER.

33. OPEN LINE ENDS AND FLUSH THOROUGHLY BEFORE INSTALLATION OF END
FLUSH GAPS.

34. FLUSH MAINLINES AFTER INSTALLING RISERS AND PRIOR TO INSTALLING OR
RECONNECTING TO VALVES.

35. FLUSH MAINLINES AFTER INSTALLING RISERS AND PRIOR TO INSTALLING TUBING.

36. PRESSURE TEST PRIOR TO BACKFLOWING. PROVIDE RESULTS TO OWNER'S REP.

37. FILL ALL EXCAVATIONS WITH COMPACTED BACKFILL IN TWO EIGHT VIBRATED
COMPACTED LIFTS. DEPRIV ALL SETTLED BRACKES.

38. PERFORM COVERAGE TEST. ADJUST SYSTEMS NEEDED TO PROVIDE FULL
COVERAGE AND TO AVOID RUNOFF.

39. AFTER COMPLETION PROVIDE AS-BUILT PLANS.

40. PROVIDE CONTROLLER SCHEDULE.

41. SCHEDULE THE TREE ZONE TO RUN AT A LOW FREQUENCY AND LONG
DURATION TO PROVIDE DEEP WATERING FOR THE TREES. ADJUST SCHEDULE
PER WEATHER AND SEASON.

42. SCHEDULE THE SHRUB ZONE TO RUN AT A HIGH FREQUENCY AND SHORT
DURATION TO ESTABLISH THE NEW SHRUBS. ADJUST THE SCHEDULE AS THE
SHRUBS BECOME ESTABLISHED AND PER WEATHER AND SEASON.

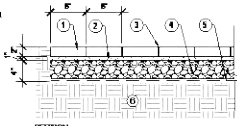
43. THE DESIGN INTENT IS TO PROVIDE THE MINIMUM AMOUNT OF WATER TO
SUSTAIN LIFE OF THE GROUND COVER AND TO AVOID RUNOFF OF LOW HEAD
DRAINAGE AND OVERSPRAY.

1. FIRM: **ABLA**
 2. PROJECT: **RECREATION CENTER, 400 S. 12TH ST., ARLINGTON, VA 22204**
 3. DRAWING NO.: **01-01**
 4. DATE: **01/15/01**
 5. SCALE: **1/8" = 1'-0"**
 6. SHEET NO.: **1 OF 1**
 7. PROJECT NO.: **01-01**
 8. DRAWING NO.: **01-01**
 9. DATE: **01/15/01**
 10. SCALE: **1/8" = 1'-0"**
 11. SHEET NO.: **1 OF 1**
 12. PROJECT NO.: **01-01**
 13. DRAWING NO.: **01-01**
 14. DATE: **01/15/01**
 15. SCALE: **1/8" = 1'-0"**
 16. SHEET NO.: **1 OF 1**
 17. PROJECT NO.: **01-01**
 18. DRAWING NO.: **01-01**
 19. DATE: **01/15/01**
 20. SCALE: **1/8" = 1'-0"**
 21. SHEET NO.: **1 OF 1**
 22. PROJECT NO.: **01-01**
 23. DRAWING NO.: **01-01**
 24. DATE: **01/15/01**
 25. SCALE: **1/8" = 1'-0"**
 26. SHEET NO.: **1 OF 1**
 27. PROJECT NO.: **01-01**
 28. DRAWING NO.: **01-01**
 29. DATE: **01/15/01**
 30. SCALE: **1/8" = 1'-0"**
 31. SHEET NO.: **1 OF 1**
 32. PROJECT NO.: **01-01**
 33. DRAWING NO.: **01-01**
 34. DATE: **01/15/01**
 35. SCALE: **1/8" = 1'-0"**
 36. SHEET NO.: **1 OF 1**
 37. PROJECT NO.: **01-01**
 38. DRAWING NO.: **01-01**
 39. DATE: **01/15/01**
 40. SCALE: **1/8" = 1'-0"**
 41. SHEET NO.: **1 OF 1**
 42. PROJECT NO.: **01-01**
 43. DRAWING NO.: **01-01**
 44. DATE: **01/15/01**
 45. SCALE: **1/8" = 1'-0"**
 46. SHEET NO.: **1 OF 1**
 47. PROJECT NO.: **01-01**
 48. DRAWING NO.: **01-01**
 49. DATE: **01/15/01**
 50. SCALE: **1/8" = 1'-0"**
 51. SHEET NO.: **1 OF 1**
 52. PROJECT NO.: **01-01**
 53. DRAWING NO.: **01-01**
 54. DATE: **01/15/01**
 55. SCALE: **1/8" = 1'-0"**
 56. SHEET NO.: **1 OF 1**
 57. PROJECT NO.: **01-01**
 58. DRAWING NO.: **01-01**
 59. DATE: **01/15/01**
 60. SCALE: **1/8" = 1'-0"**
 61. SHEET NO.: **1 OF 1**
 62. PROJECT NO.: **01-01**
 63. DRAWING NO.: **01-01**
 64. DATE: **01/15/01**
 65. SCALE: **1/8" = 1'-0"**
 66. SHEET NO.: **1 OF 1**
 67. PROJECT NO.: **01-01**
 68. DRAWING NO.: **01-01**
 69. DATE: **01/15/01**
 70. SCALE: **1/8" = 1'-0"**
 71. SHEET NO.: **1 OF 1**
 72. PROJECT NO.: **01-01**
 73. DRAWING NO.: **01-01**
 74. DATE: **01/15/01**
 75. SCALE: **1/8" = 1'-0"**
 76. SHEET NO.: **1 OF 1**
 77. PROJECT NO.: **01-01**
 78. DRAWING NO.: **01-01**
 79. DATE: **01/15/01**
 80. SCALE: **1/8" = 1'-0"**
 81. SHEET NO.: **1 OF 1**
 82. PROJECT NO.: **01-01**
 83. DRAWING NO.: **01-01**
 84. DATE: **01/15/01**
 85. SCALE: **1/8" = 1'-0"**
 86. SHEET NO.: **1 OF 1**
 87. PROJECT NO.: **01-01**
 88. DRAWING NO.: **01-01**
 89. DATE: **01/15/01**
 90. SCALE: **1/8" = 1'-0"**
 91. SHEET NO.: **1 OF 1**
 92. PROJECT NO.: **01-01**
 93. DRAWING NO.: **01-01**
 94. DATE: **01/15/01**
 95. SCALE: **1/8" = 1'-0"**
 96. SHEET NO.: **1 OF 1**
 97. PROJECT NO.: **01-01**
 98. DRAWING NO.: **01-01**
 99. DATE: **01/15/01**
 100. SCALE: **1/8" = 1'-0"**
 101. SHEET NO.: **1 OF 1**
 102. PROJECT NO.: **01-01**
 103. DRAWING NO.: **01-01**
 104. DATE: **01/15/01**
 105. SCALE: **1/8" = 1'-0"**
 106. SHEET NO.: **1 OF 1**
 107. PROJECT NO.: **01-01**
 108. DRAWING NO.: **01-01**
 109. DATE: **01/15/01**
 110. SCALE: **1/8" = 1'-0"**
 111. SHEET NO.: **1 OF 1**
 112. PROJECT NO.: **01-01**
 113. DRAWING NO.: **01-01**
 114. DATE: **01/15/01**
 115. SCALE: **1/8" = 1'-0"**
 116. SHEET NO.: **1 OF 1**
 117. PROJECT NO.: **01-01**
 118. DRAWING NO.: **01-01**
 119. DATE: **01/15/01**
 120. SCALE: **1/8" = 1'-0"**
 121. SHEET NO.: **1 OF 1**
 122. PROJECT NO.: **01-01**
 123. DRAWING NO.: **01-01**
 124. DATE: **01/15/01**
 125. SCALE: **1/8" = 1'-0"**
 126. SHEET NO.: **1 OF 1**
 127. PROJECT NO.: **01-01**
 128. DRAWING NO.: **01-01**
 129. DATE: **01/15/01**
 130. SCALE: **1/8" = 1'-0"**
 131. SHEET NO.: **1 OF 1**
 132. PROJECT NO.: **01-01**
 133. DRAWING NO.: **01-01**
 134. DATE: **01/15/01**
 135. SCALE: **1/8" = 1'-0"**
 136. SHEET NO.: **1 OF 1**
 137. PROJECT NO.: **01-01**
 138. DRAWING NO.: **01-01**
 139. DATE: **01/15/01**
 140. SCALE: **1/8" = 1'-0"**
 141. SHEET NO.: **1 OF 1**
 142. PROJECT NO.: **01-01**
 143. DRAWING NO.: **01-01**
 144. DATE: **01/15/01**
 145. SCALE: **1/8" = 1'-0"**
 146. SHEET NO.: **1 OF 1**
 147. PROJECT NO.: **01-01**
 148. DRAWING NO.: **01-01**
 149. DATE: **01/15/01**
 150. SCALE: **1/8" = 1'-0"**
 151. SHEET NO.: **1 OF 1**
 152. PROJECT NO.: **01-01**
 153. DRAWING NO.: **01-01**
 154. DATE: **01/15/01**
 155. SCALE: **1/8" = 1'-0"**
 156. SHEET NO.: **1 OF 1**
 157. PROJECT NO.: **01-01**
 158. DRAWING NO.: **01-01**
 159. DATE: **01/15/01**
 160. SCALE: **1/8" = 1'-0"**
 161. SHEET NO.: **1 OF 1**
 162. PROJECT NO.: **01-01**
 163. DRAWING NO.: **01-01**
 164. DATE: **01/15/01**
 165. SCALE: **1/8" = 1'-0"**
 166. SHEET NO.: **1 OF 1**
 167. PROJECT NO.: **01-01**
 168. DRAWING NO.: **01-01**
 169. DATE: **01/15/01**
 170. SCALE: **1/8" = 1'-0"**
 171. SHEET NO.: **1 OF 1**
 172. PROJECT NO.: **01-01</**

Paving Details

- 2" THICK OF 3/4" OR SMALLER AGGREGATE (NO FIBER)
- 4" CLASS II PERMEABLE AGGREGATE BASE ROCK, COMPACT TO 80%
- FILTER FABRIC (OPTIONAL)
- EDGING AND SLOPE (OPTIONAL)
- UNDISTURBED SUBGRADE OR COMPACTED TO 80%
- RETAINMENT FILLING: SLOPE WITH PRIMARY BASE (OPTIONAL) SEE DETAIL #11 THIS PAGE

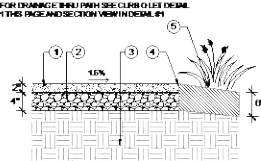
NOTE: FOR CLAY SOILS, HOLD 10" AWAY FROM FOUNDATION, AND PROVIDE SUBDRAINAGE PERMANENT WITH GEOTECH & CIVIL ENGINEER.



1 PERMEABLE AGGREGATE PAVING - PATH OR PATIO
SCALE: 1"=1'-0"

- STABILIZED 3/4" AGGREGATE, TERRAZZO, RECUPERO OR EQUAL STABILIZED PRODUCT APPLIED PER MANUFACTURER SPECIFICATION SLOPE TO PLANESIDE @ 1.0%
- CLASS II RECYCLED AGGREGATE BASE, COMPACT TO 80%
- SUBGRADE UNDISTURBED OR COMPACTED TO 80%
- METAL EDGE, 1/4" X 1/4", ALUMINUM, STEEL OR ALTERNATE
- AMENDED SOIL OF ADJACENT PLANTING, SLOPE AWAY FROM PATH 2% MIN.

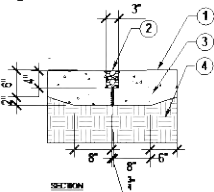
NOTES:
1. THIS PAVING IS IMPERVIOUS AND SHOULD HAVE POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS.
2. FOR DRAINAGE, 3/4" INCH SEE CURB OLE DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #11



5 STABILIZED AGGREGATE - PATH OR PATIO
SCALE: 1"=1'-0"

- CONCRETE DRIVEWAY - DESIGN BY OTHERS. SEE NOTE 1.
- GRAVEL DRAINAGE SEAM
- EXPANSION JOINT
- COMPACTED SUBGRADE - DEPTH DETERMINED BY GEOTECH ENG.

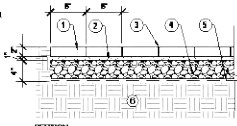
NOTES:
1. DRIVEWAY ENGINEERING BY OTHERS TO INCLUDE PROPER DESIGN FOR LOADS AND SOILS.
2. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT RECOMMENDED.



9 CONCRETE - VEHICLE - GRAVEL DRAINAGE SEAMS
SCALE: 1"=1'-0"

- CONCRETE OR ROCK PAVERS (6" X 12" THICK, MINIMUM) CAN BE PERVIOUS OR IMPERVIOUS. SELECT PERMANENT DESIGN.
- 1" SAND SETTING BED PER MANUFACTURER, ASSUME
- JUNE FILL PER MANUFACTURER, ASSUME
- CLASS II PERMEABLE AGGREGATE BASE ROCK
- FILTER FABRIC (OPTIONAL)
- COMPACTED SUBGRADE, 80%

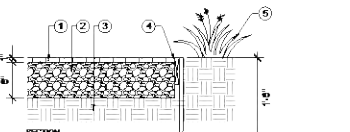
NOTE:
1. FOR CLAY SOILS, HOLD 10" AWAY FROM FOUNDATION AND PROVIDE SUBDRAINAGE PERMANENT WITH GEOTECH & CIVIL ENGINEER.
2. FOR DRAINAGE, 3/4" INCH SEE CURB OLE DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #11



2 PERMEABLE PAVERS - PATH OR PATIO
SCALE: 1"=1'-0"

- GRAVEL DRAINAGE SEAM: STABILIZED OR APPROVED EQUAL AGGREGATE FILL, SELECTED BY OWNER. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- PERMEABLE CLASS II AGGREGATE BASE ROCK, COMPACT TO 80%
- SUBGRADE UNDISTURBED OR COMPACTED TO 80%
- 2" SAND SETTING BED, 1/4" X 1/4", @ 6" O.C. SQUARE OVERLAPPING JOINTS AND SEAMS AT 3" O.C. OPTIONAL CONCRETE CURB.
- ADJACENT PLANTING AREA

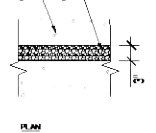
NOTE: CONSULT WITH GEOTECHNICAL & CIVIL ENGINEER FOR AGGREGATE DEPTH, PERFORMANCE IN CLAY SOIL SAND NEED FOR 30' BEHINDS.



6 GRAVEL PAVE PAVING - VEHICLE
SCALE: 1"=1'-0"

- STABILIZED 3/4" AGGREGATE, STABILIZED RECUPERO OR EQUAL, CONTROL RUNNING AND CROSS SLOPES FOR ACCESSIBILITY.
- RECYCLED CLASS II AGGREGATE BASE ROCK, COMPACT TO 80%, COMPACT AGGREGATE DEPTH BY GEOTECH ENG.
- SUBGRADE UNDISTURBED OR COMPACTED TO 80%
- PERMANENT EDGE, 1/4" X 1/4", STEEL OR ALUMINUM, OR CONCRETE CURB
- ADJACENT PLANTING AREA, SLOPE AWAY FROM PAVING

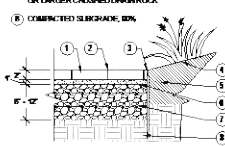
NOTE: MINIMUM 6" CHALKY MUDCH AWAY FROM FOUNDATION, SEE DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #11



10 STABILIZED AGGREGATE - VEHICLE
SCALE: 1"=1'-0"

- PERVIOUS PAVEMENT OR PERVIOUS AGGREGATE
- HANDMADE JOINTS, SAND SETTING
- METAL EDGING
- AMENDED PLANTING BED, FINISH GRADE CAN SLOPE TOWARD PAVING TO INFILTRATE
- 1" SAND SETTING BED
- FILTER FABRIC
- CLASS II PERMEABLE AGGREGATE BASE ROCK, OR LARGER CRUSHED DRAINAGE ROCK
- COMPACTED SUBGRADE, 80%

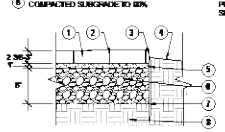
NOTES:
1. FOR CLAY SOILS, HOLD 10" AWAY FROM FOUNDATION AND PROVIDE SUBDRAINAGE PERMANENT WITH GEOTECH & CIVIL ENGINEER.
2. FOR DRAINAGE, 3/4" INCH SEE CURB OLE DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #11



3 PERMEABLE INFILTRATION - PEDESTRIAN
SCALE: 1"=1'-0"

- CONCRETE DRIVEWAY - DESIGN BY OTHERS. SEE NOTE 2 AND GENERAL NOTES THIS PAGE.
- JOINTS PER MANUFACTURER'S INSTRUCTIONS
- METAL EDGING, OPTIONAL, CONCRETE CURB
- SHOULDER, FINISH GRADE
- SAND SETTING BED PER MANUFACTURER'S INSTRUCTIONS
- PERMEABLE CLASS II AGGREGATE BASE ROCK, COMPACT TO 80%
- FILTER FABRIC
- COMPACTED SUBGRADE TO 80%

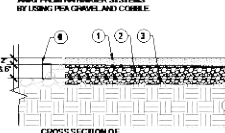
NOTE: CONSULT WITH GEOTECHNICAL & CIVIL ENGINEER FOR AGGREGATE BASE, DRAINAGE PERFORMANCE IN CLAY SOILS SAND NEED FOR SUBDRAINAGE



7 PERVIOUS OR PERMEABLE UNIT PAVE - VEHICLE
SCALE: 1"=1'-0"

- PRIMARY PAVING MATERIAL, PROVIDE 2" SURFACING MATERIAL OVER CURB OLE SUBSUE
- AGGREGATE BASE ROCK MINIMUM PROTECTING 1/4" UNDER CURB OLE SUBSUE
- FILTER FABRIC (OPTIONAL)
- EDGING AND SLOPE (OPTIONAL)
- UNDISTURBED SUBGRADE OR COMPACTED TO 80%
- CLASS II RECYCLED AGGREGATE BASE ROCK, SLOPE TOWARD DRAINAGE SLOPE THROUGH PERMANENT BASE, CRUSHED, SLOPE, SLOPE, SLOPE
- PROVIDE INLET AND OUTLET OF DRAINAGE SUBSUE WITH 1/4" INCH COBBLE

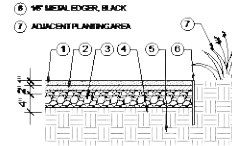
NOTE: MINIMUM 6" CHALKY MUDCH AWAY FROM FOUNDATION, SEE DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #11



11 RECTANGULAR DRAINAGE SLEEVE IN PATHS
SCALE: NOT TO SCALE

- 1" OF 3/4" OR SMALLER PATHWAY AGGREGATE
- 1" OF DECOMPOSED GRANITE IF STABILIZED PRODUCT
- RECYCLED CLASS II AGGREGATE BASE ROCK, COMPACT TO 80%
- FILTER FABRIC (OPTIONAL)
- SUBGRADE UNDISTURBED OR COMPACTED TO 80%
- 1/4" METAL EDGE, BLACK
- ADJACENT PLANTING AREA

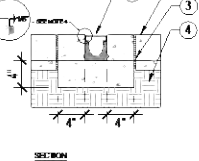
NOTES:
1. THIS PAVING IS SEMI-PERVIOUS AND SHOULD HAVE POSITIVE DRAINAGE ON SURFACE OF BASE ROCK AWAY FROM BUILDING FOUNDATIONS.
2. FOR DRAINAGE, 3/4" INCH SEE CURB OLE DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #11



4 AGGREGATE PAVING - PEDESTRIAN
SCALE: 1"=1'-0"

- CONCRETE DRIVEWAY - DESIGN BY OTHERS. SEE NOTE 2 AND GENERAL NOTES THIS PAGE.
- BRANCH DRAIN, SLOPE TOWARD OTHERS, SEE NOTE 1
- EXPANSION JOINT REQUIRED, SEE NOTE 2
- COMPACTED SUBGRADE - DESIGN BY OTHERS. SEE NOTE 2

NOTES:
1. BRANCH DRAIN, SLOPE TOWARD OTHERS, SEE NOTE 1. REFER TO MANUFACTURER'S LATEST INSTALLATION INSTRUCTIONS FOR DETAILS.
2. DRIVEWAY ENGINEERING BY OTHERS, INCLUDE PROPER DESIGN FOR LOADS AND SOILS, PLACEMENT OF EXPANSION JOINTS AND REINFORCEMENT.



8 CONCRETE - VEHICLE - TRENCH DRAIN
SCALE: 1"=1'-0"

GENERAL NOTES:

- DESIGN STRATEGY: THESE DETAILS ARE PROVIDED TO CREATE OPTIONS FOR PERMEABLE PAVING, AND PAVING STRATEGIES THAT PROMOTE SUBSURFACE INFILTRATION IN LANDSCAPE SPACES. THESE STRATEGIES HELP CLEAN WATER INFILTRATE RUNOFF INTO GROUNDWATER, AND PROVIDE MORE SOIL MOISTURE AVAILABILITY FOR LANDSCAPE PLANTINGS.
- THESE DETAILS SHOULD BE EVALUATED BY THE SITE ENGINEER AND ADJUSTED TO SITE CONDITIONS.
- PAVING DEPTH, DEPTH OF BASE GRAVEL, SUB-BASE PREPARATION AND CONCRETE REINFORCEMENT SHOULD ALL BE EVALUATED AND ADJUSTED AS NEEDED BY A GEOTECHNICAL ENGINEER.
- SOIL TYPE AFFECTS THE PERFORMANCE OF THESE DETAILS. CLAY SOILS DO NOT INFILTRATE WELL, SO THERE IS A NEED TO EVALUATE WHETHER THE PERMEABLE PAVING DETAILS ARE APPROPRIATE FOR SPECIFIC SITES AND ADJUST THEM AS APPROPRIATE TO PROTECT BUILDINGS AND OTHER IMPROVEMENTS.
- ACCESSIBLE PAVING IS SMOOTH, FIRM, AND HAS A CROSS SLOPE NOT TO EXCEED 2%. RUNNING SLOPE SHOULD BE 0% OR LESS UNLESS PAVING RAMP WITH HANDRAILS. SEE TITLE 24 OF CALIFORNIA CODE FOR ACCESSIBILITY REQUIREMENTS AND STANDARDS.

ABLA
ARCHITECTURAL & BUILDING
DESIGN, LLC
1000 N. 10TH AVE., SUITE 100
DENVER, CO 80202
TEL: (303) 733-1111
WWW.ABLA-ARCHITECTS.COM

daily acts
A COMMITMENT TO EXCELLENCE

ForeSite
LANDSCAPE ARCHITECTS

Equinox
DESIGN

SHERWOOD
DESIGN ENGINEERS

P D G
PROFESSIONAL DESIGN GROUP
LANDSCAPE ARCHITECTS

RESIDENTIAL LANDSCAPE DESIGN TEMPLATE
DESIGN IN PLANTING AREA WATER PLANTING
www.abla-architects.com

NAME _____
SITE ADDRESS _____

SAVING WATER PARTNER

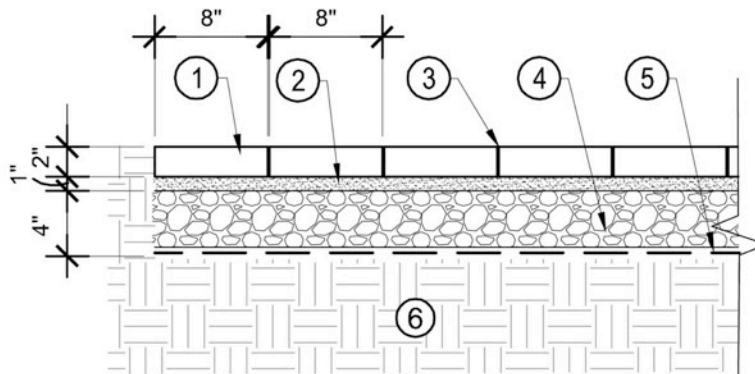
SHEET TITLE:
L.I.D.
PAVING
DETAILS

DATE:
PROJECT PLAN
ANNEX 3, 2019

L-3.0

SHEET
OF

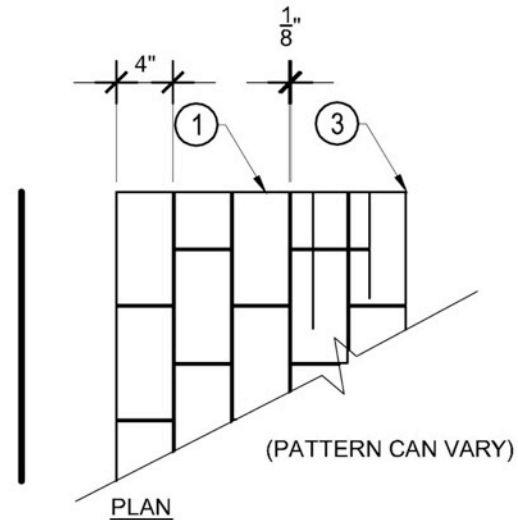
- ① CONCRETE OR BRICK PAVERS (L" x W" x THK" VARIES).
PAVERS CAN BE PERVIOUS OR PERMEABLE.
SELECT PAVER PATTERN.
- ② 1" SAND SETTING BED PER MANUFACTURER, ASTM #8
- ③ JOINT FILL PER MANUFACTURER, ASTM #8
- ④ CLASS 2 PERMEABLE AGGREGATE BASE ROCK
- ⑤ FILTER FABRIC (OPTIONAL)
- ⑥ COMPACTED SUBGRADE, 90%



SECTION

NOTE:

1. FOR CLAY SOILS, HOLD 10' AWAY FROM FOUNDATION, AND PROVIDE SUBDRAINAGE. REVIEW WITH GEOTECH. & CIVIL ENGINEER,
2. FOR DRAINAGE THRU PATH SEE CURB O LET DETAIL #11 THIS PAGE AND SECTION VIEW IN DETAIL #1



PLAN

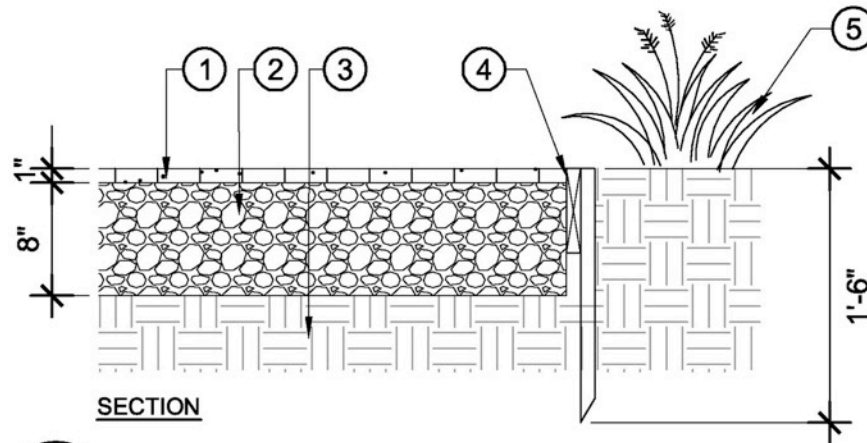
2

PERMEABLE PAVERS - PATH OR PATIO (OPTIONAL)

SCALE: 1"=1'-0"

- ① GRAVEL PAVE XL PAVING SYSTEM. OR APPROVED EQUAL. AGGREGATE FILL SELECTED BY OWNER. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- ② PERMEABLE CLASS 2 AGGREGATE BASE ROCK. COMPACT TO 95%
- ③ SUBGRADE UNDISTURBED OR COMPACTED TO 90%
- ④ 2X6 RDW HEADER, 18" STAKES @ 6' O.C., SCAB AT OVERLAPPING ENDS AND STAKE AT 3' O.C. OPTIONAL CONCRETE CURB.
- ⑤ ADJACENT PLANTING AREA

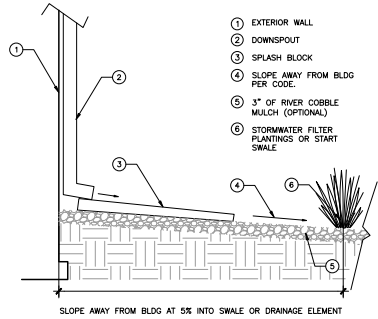
NOTE: CONSULT WITH GEOTECHNICAL & CIVIL ENGINEER FOR AGGREGATE DEPTH, PERFORMANCE IN CLAY SOILS AND NEED FOR SUBDRAINS.



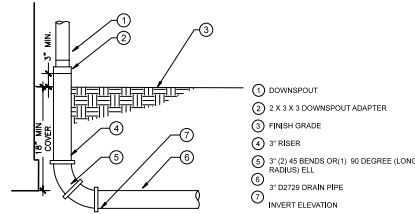
6 GRAVELPAVE PAVING - VEHICLE (OPTIONAL)

SCALE: 1"=1'-0"

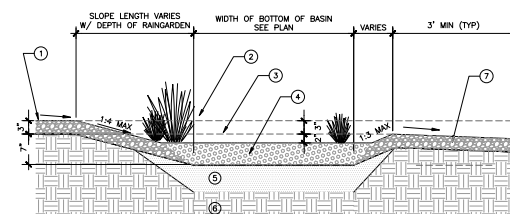
Raingarden & Swales Details



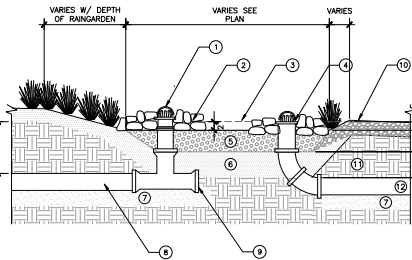
1 DOWNSPOUT SPLASHBLOCK TO OVERLAND FLOW
SCALE: 1/2"=1'-0"



2 DOWNSPOUT WITH PIPED OUTLET
SCALE: 1/2"=1'-0"



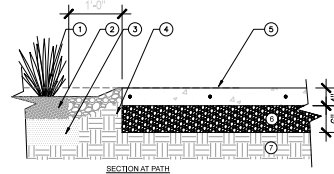
3 VEGETATED RAINGARDEN W/ OVERLAND FLOW INLET & OUTLET
SCALE: 1/2"=1'-0"



4 VEGETATED RAINGARDEN W/ PIPED INLET
SCALE: 1/2"=1'-0"

1. ATRIUM DRAIN GRATE ON OUTLET BUBBLER CONNECTED TO DOWNSPOUT, BY NDS OR EQUAL
2. COBBLE AROUND OUTLET PIPE (TYP.)
3. MAX WATER LEVEL 2" ABOVE PEA GRAVEL
4. DRAIN INLET STRUCTURE AT TOP PONDING ELEVATION (2" ABOVE PEA GRAVEL), PIPE TO OUTLET.
5. 5" PEA GRAVEL MULCH INSURES NO PONDING WITHIN 72 HRS FOR MOSQUITO CONTROL.
6. SCARIFY & AMEND NATIVE SOIL AT BOTTOM OF RAIN GARDEN
7. 6" SAND OR GRAVEL SETTING BED UNDER PIPE
8. 4" STORMDRAIN PIPE FROM ROOF DOWNSPOUT(S)
9. END PLUG W/ (1) 1/2" DEEP HOLE 1" ABOVE PIPE INVERT, SET END OF PIPE IN 1/2"x12" GRAVEL TRENCH FOR DRAINAGE
10. SECONDARY OVERFLOW SLIGHTLY HIGHER THAN PIPE INLET, COVER WITH 3" OF 1.5-6" RIVER COBBLE
11. UNDISTURBED SUBGRADE
12. OUTLET PIPE, OUTLET TO RAINWATER BASIN 6" MIN. DOWNSLOPE OR CONNECT TO EXISTING STORM DRAIN PIPE OR OUTLET AT CURB IF PRESENT.

NOTES:
1. RAINWATER GARDEN DESIGNED FOR CLAY SOILS. MAX DEPTH 7" OF WHICH 5" HAS A PEA GRAVEL MULCH.
2. NO WOOD CHIP MULCH IN RAINWATER SYSTEMS TO AVOID CLOGGING STORM DRAIN. MAINTAIN GRAVEL MULCH THROUGHOUT SWALES AND RAINGARDENS TO SIDEWALK.



5 RAINGARDEN OVERFLOWING OVER PAVEMENT SECTION
SCALE: 1/2"=1'-0"

1. BERM, CONSTRUCT WHILE DIGGING BASIN. CAN BE MADE WIDER TO BE A WALKING PATH
2. EXISTING SLOPE 8% OR LESS
3. 3" PEA GRAVEL MULCH INSURES NO PONDING WITHIN 72 HRS FOR MOSQUITO CONTROL. TOTAL DEPTH INCLUDING PONDING IS 7". SEE DETAIL 9 FOR ROCK CHECK DAMS
4. SCARIFY & AMEND NATIVE SOIL AT BOTTOM OF RAIN GARDEN
5. UNDISTURBED SUBGRADE
6. NOTES:
1. MINIMUM SLOPE IN THE DIRECTION OF FLOW TO BE 0.5%. IF SLOPE EXCEEDS 2% STEP DOWN IN CASCADE PER DETAIL 9 ON THIS PAGE.
2. NO WOOD CHIP OR BARK MULCH IN RAINWATER SYSTEMS TO AVOID CLOGGING STORM DRAINS.

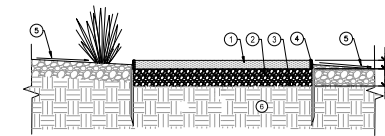
8 SWALE/CASCADE ON SLOPE - SECTION
1/2"=1'-0"

1. PLANTING IN RAIN GARDEN.
2. 5" PEA GRAVEL MULCH INSURES NO PONDING WITHIN 72 HRS FOR MOSQUITO CONTROL. TOTAL DEPTH INCLUDING PONDING IS 7".
3. RIVER COBBLE: 1.5-6" IN SIZE. FILL TO PAVEMENT EDGE
4. SCARIFY & AMEND NATIVE SOIL AT BOTTOM OF RAIN GARDEN.
5. CONCRETE OR OTHER IMPERVIOUS MULCH
6. CLASS II RECYCLED AGGREGATE BASE ROCK
7. UNDISTURBED SUBGRADE.

NOTES:
1. ENSURE NO MULCH OR SOIL WASHES ON TO PATH: USE RIVER COBBLE TO MAINTAIN CLEAN EDGE.
2. NO MULCH IN RAINWATER SYSTEMS TO AVOID CLOGGING STORM DRAINS.

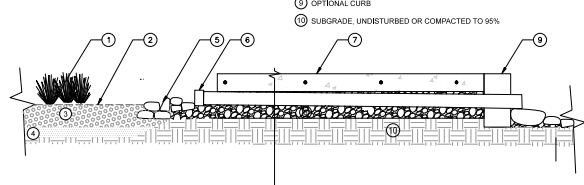
1. PERMEABLE AGGREGATE PAVING: 2" THICK OF 3/8" OR SMALLER AGGREGATE (NO FINES)
2. 4" CLASS II PERMEABLE AGGREGATE BASE ROCK, COMPACT TO 95%
3. FILTER FABRIC
4. EDGING AND STAKE (OPTIONAL)
5. RAINWATER FLOWING WITHIN 4" OF 1.5-6" RIVER COBBLE FROM DOWNSPOUT OR RAINGARDEN
6. NATIVE SOIL SCARIFY TOP 3" TO IMPROVE INFILTRATION UNDER COBBLE

NOTE:
1. REVIEW DETAIL WITH GEOTECH & CIVIL ENGINEER
2. SITE 10' AWAY FROM FOUNDATION.

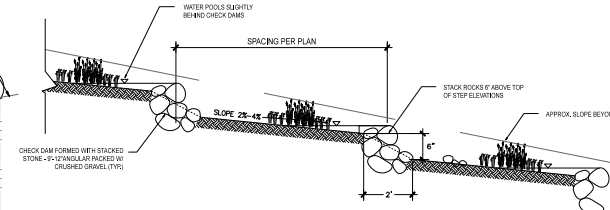
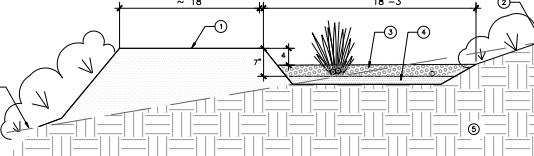


6 RAINWATER FLOW THRU PERMEABLE PAVING SECTION
SCALE: 1/2"=1'-0"

NOTES:
1. REVIEW PAVING WITH CIVIL & GEOTECHNICAL ENGINEER
SEE DETAIL #7 ON SHEET L3.2



7 DRAIN SLEEVE THRU PATH FROM RAINGARDEN
SCALE: 1/2"=1'-0"



9 SWALE/CASCADE ON SLOPE - LONGITUDINAL SECTION
1/2"=1'-0"

RESIDENTIAL LANDSCAPE DESIGN (SHEET TEMPLATE)
SHERWOOD DESIGN ARCHITECTURE
P D G



ANN BAKER LANDSCAPE ARCHITECTURE
6020 S. STE 10
PETALUMA, CA 94952
TEL: 707.764.0400
EMAIL: ann@annbaker.com

daily acts
designing a better world

ForeSite
digital mapping solutions

Equinox
LANDSCAPE

SHERWOOD
DESIGN ARCHITECTURE

P D G
PANORAMIC DESIGN GROUP
LANDSCAPE ARCHITECTURE

RESIDENTIAL LANDSCAPE DESIGN (SHEET TEMPLATE)
SHERWOOD DESIGN ARCHITECTURE
P D G

NAME: _____
SITE ADDRESS: _____

SAVING WATER PARTNERSHIP
WATER SAVING WATER PARTNERSHIP

SHEET TITLE:
RAIN GARDENS & SWALE
DETAILS

DATE
PERMIT PLAN
MAY 15, 2018

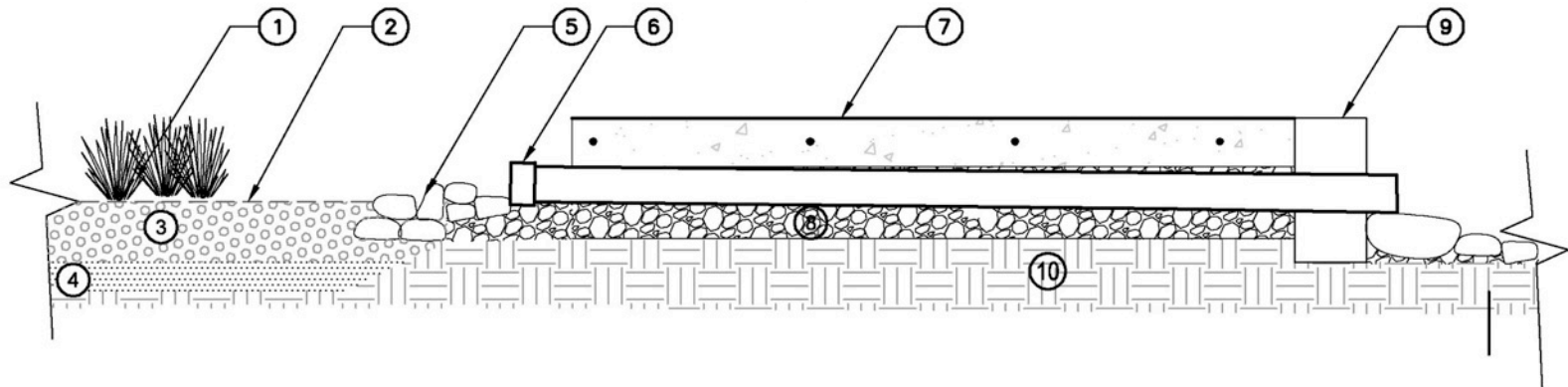
L-3.1

SHEET
OF

- ① RAIN GARDEN OR SWALE
- ② MAX PONDING LEVEL
- ③ PEA GRAVEL
- ④ AMENDED SOIL UNDER RAINGARDEN
- ⑤ 1.5"-6" RIVER COBBLE (TYP.)
- ⑥ CURB O LET INLET. SLOPE CURB O LET SLEEVE AT 2% ($\frac{1}{4}$ " PER FOOT).
- ⑦ CONCRETE OR OTHER PAVING
- ⑧ CLASS II AGGREGATE BASE ROCK
- ⑨ OPTIONAL CURB
- ⑩ SUBGRADE, UNDISTURBED OR COMPACTED TO 95%

NOTES:

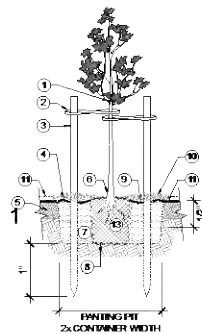
1. REVIEW PAVING WITH CIVIL &
GEOTECHNICAL ENGINEER
SEE DETAIL #7 ON SHEET L3.2



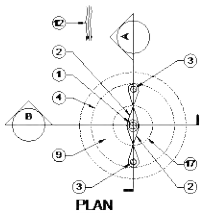
7

DRAIN SLEEVE THRU PATH FROM RAINGARDEN (OPTIONAL)

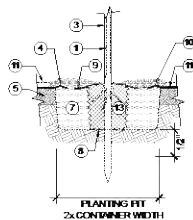
SCALE: N.T.S.



SECTION A



PLAN



SECTION B

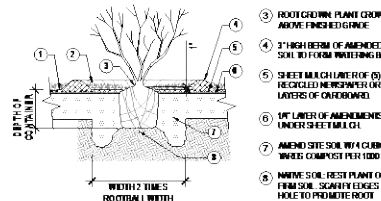
1 TREE PLANTING

NOT TO SCALE

- 1 TREE, CENTRAL LEADER
- 2 SYNTHETIC STRAPPING, LOOP AROUND CENTRAL LEADER BELOW FIRST BRANCH LINE. STRAP PER STAKE, ADJUST TO STAKES W/ SHEET METAL SCREWS
- 3 WOOD STAKES, (2) PER TREE, SET PLUMB, OUTSIDE OF ROOTBALL, ON A LINE PARALLEL TO DIRECTION OF PREVAILING WIND. SET FAR ENOUGH FROM TREE THAT BRANCHES DO NOT TOUCH STAKES. STAKES SHALL BE SPACED AN EQUAL DISTANCE FROM THE CENTRAL LEADER.
- 4 WATERING BERM, 3" H
- 5 TOP SOIL, NATIVE. USE DIGGING FORK TO REMOVE COMPACTION, DO NOT TILL
- 6 CROWN OF ROOTBALL, SET 3" ABOVE FINISH GRADE
- 7 PLANTING PIT BACKFILL, PER SPECS
- 8 PLANTING PIT, SCARIFY EDGES, INSURE ROOT BALL RESTS ON FIRM SOIL AND WILL NOT SINK OVER TIME
- 9 WATERING BASIN
- 10 MULCH, PER SPECS, 3" LAYER, KEEP IT AWAY FROM TRUNK
- 11 SHEET MULCH 2 LAYERS CARDBOARD, OR (B) LAYERS RECYCLED NEWSPAPER, 1" OF COMPOST UNDER PAPER
- 12 DIRECTION OF PREVAILING WIND
- 13 ROOTBALL, SCARIFY OUTER 1"

NOTES:

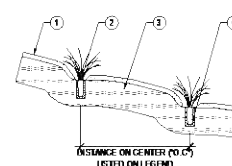
1. NAIL STAKES AS SHORT AS POSSIBLE, BUT NOT ENOUGH TO HOLD THE TREE UPRIGHT UNDER CALM CONDITIONS. THE TREE SHOULD RETURN TO VERTICAL AFTER THE WIND HAS BENT THE TOP.
2. SUPPORT FOR THE TRUNK AT JUST ONE LEVEL, NEAR THE TOP OF THE STAKES.
3. PROVIDE FLEXIBLE MOVEMENT AT THE POINT WHERE STRAPPING WRAPS LOOSELY AROUND THE CENTRAL LEADER OF THE TREE.
4. TAKE CARE NOT TO CAUSE RUBBING OR GIRDLING INJURIES.
5. STAKES ARE FOR PROTECTION OF THE TREE FOR AFTERGROWTH AFTER PLANTING. REMOVE STAKES AS SOON AS TREE ESTABLISHES ITS ROOT SYSTEM - WITH IN 18 MONTHS MAX.



2 PLANTING - SHRUBS, PERENNIALS, GRASSES

NOT TO SCALE

- 1 FINISHED GRADE
- 2 3" THICK MULCH, KEEP 3" AWAY FROM ROOT GROWTH
- 3 ROOT GROWN PLANT GROWN 1" ABOVE FINISHED GRADE
- 4 3" HIGH BERM OF AMENDED SITE SOIL, 30" FROM WATERING BASIN
- 5 SHEET MULCH LAYER OF (B) PLY RECYCLED NEWSPAPER OR 2 LAYERS OF CARDBOARD
- 6 1" LAYER OF AMENDMENTS UNDER SHEET MULCH
- 7 AMEND SITE SOIL W/ 4 CUBIC YARDS COMPOST PER 1000 SF
- 8 NATIVE SOIL, REST PLANT ON FIRM SOIL, SCARIFY EDGES OF PIT TO PROMOTE ROOT GROWTH

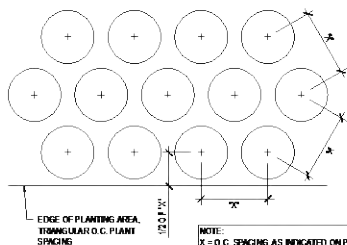


3 PLUG PLANTING

NOT TO SCALE

- 1 MULCH 1" FINE GRASS PILES IF APPLIED WILL BE OVER SEED MULCH WITH HOSE STRIP OR 3" OF COMPOST
- 2 2" PLUG (DISTURBE PLANT GROWN 1" ABOVE FINISHED GRADE)
- 3 AMENDED SOIL PER WELL REQUIREMENTS
- 4 PLANTING HOLE: USE DOBBLE TO CREATE A HOLE, SLIGHTLY LARGER THAN PLUG. PLACE PLUG FIRM IN HOLE WITH CORN MEAL OR SUGAR AT BOTTOM. DEPTH OF SHARPENING HOLE LEAVE NO AIRY OR CRACKS AROUND ROOTS. BACKFILL HOLE WITH GARDEN SOIL, NOT MULCH

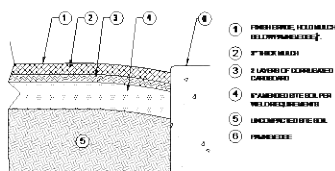
NOTES:
1. PLUG PLUG STRIPPED UP (PLUGS) NOT AN ANGLE TO THE SOIL.
2. GRASS PLUG PLANTINGS DO NOT REQUIRE COMPOST (WELL) BUT STRIP MULCH WITH 2" OF LESS WOOD MULCH



4 GROUND COVER PLANTING - TRI-SPACING

NOT TO SCALE

NOTE:
X = O.C. SPACING, AS INDICATED ON PLANS



5 SHEET MULCH

NOT TO SCALE

PLANT PIT & WATERING BERM TABLE

CONTAINER SIZE	PLANT PIT DIAMETER	WATERING BERM HEIGHT	WATERING BERM DIAMETER
1 GAL CAN	18" MIN	3" MIN	18" MIN
5 GAL CAN	30" MIN	4" MIN	30" MIN
15 GAL CAN	3" MIN	5" MIN	3" MIN
24" BOX	5" MIN	6" MIN	5" MIN

6 PLANT PIT AND WATERING BERM

NOT TO SCALE

ABLA
ARCHITECTURAL
LANDSCAPE
DESIGN
P.L.L.C.

ABLA
ARCHITECTURAL
LANDSCAPE
DESIGN
P.L.L.C.

daily acts
ARCHITECTURAL
LANDSCAPE
DESIGN
P.L.L.C.

ForeSite
ARCHITECTURAL
LANDSCAPE
DESIGN
P.L.L.C.

Equinox
ARCHITECTURAL
LANDSCAPE
DESIGN
P.L.L.C.

SHERWOOD
DESIGN ENGINEERING
P D G

RESIDENTIAL LANDSCAPE DESIGN TEMPLATE
SHEET TITLE: PLANTING DETAILS
DATE: 10/1/2014
PROJECT: 14-001
SHEET: 14-001

SAVING WATER
PARTNER

SHEET TITLE:
PLANTING
DETAILS

DATE:
PROJECT: 14-001
SHEET: 14-001

DATE:
PROJECT: 14-001
SHEET: 14-001

L-3.2

SHEET
OF

Key Websites

<http://www.savingwaterpartnership.org/concept-plans-and-design-templates/>

Plant Images & Information

www.calfloranursery.com

www.suncrestnurseries.com

<http://www.yerbabuenanursery.com/>

<http://theodorepayne.org>

www.hedgerowfarms.com

www.larnerseeds.com